

PointFuse plugin for Autodesk® Revit®

Version.2022.0

Quick Start Guide

The PointFuse as-built mesh plugin is a great alternative to using point cloud data in Autodesk® Revit®, developed to optimize the viewing and navigation of Reality Capture data to enhance your design processes. It works by exporting your mesh data from PointFuse to a file format (.prf) which can be attached to an existing Revit project using the free plugin.

What is required?

- An active license of **PointFuse Standard** or **PointFuse Pro**
- PointFuse installed onto a Local or Virtual Windows machine
- A PointFuse project with at least a **classified mesh model** – Find out more about mesh classification here. { <https://pointfuse.com/support/> }
- **Autodesk® Revit®** 2020 or later installed onto a Windows Machine with a valid license
- The PointFuse as-built mesh plugin Autodesk® Revit® installed on the same machine as Autodesk® Revit®

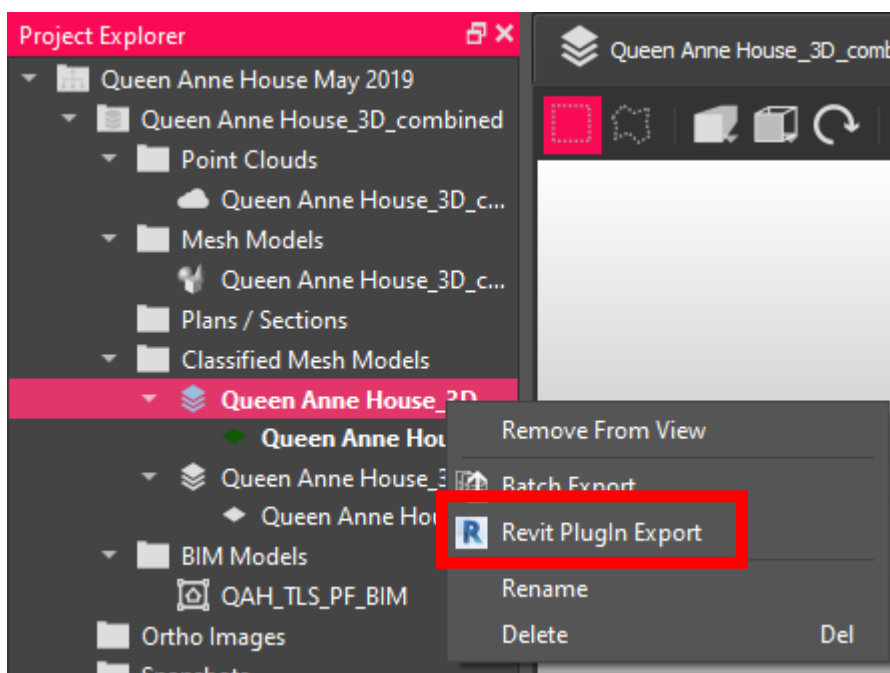
Note that the full version of PointFuse and Autodesk® Revit® do not need to be installed on the same machine.

Publishing to the Plugin

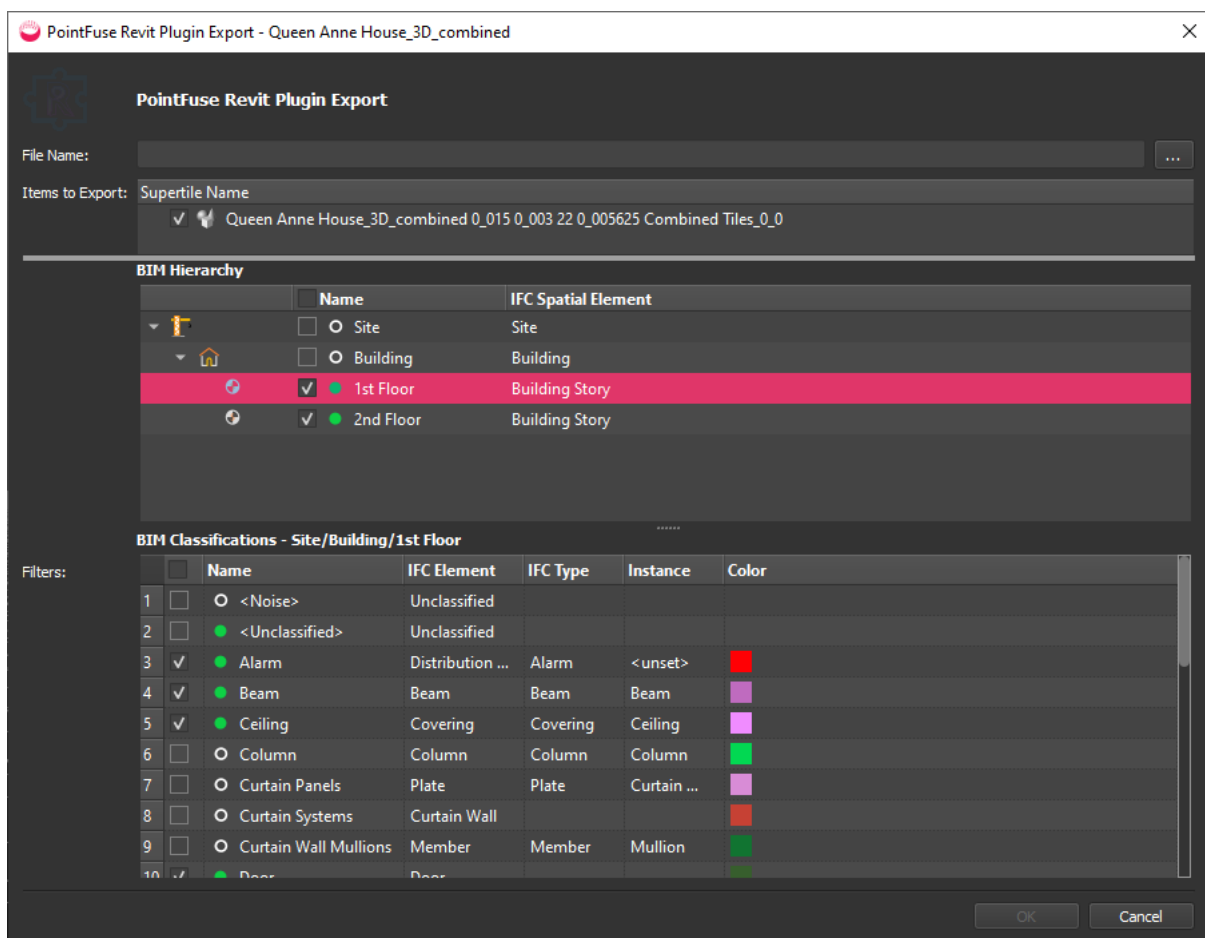
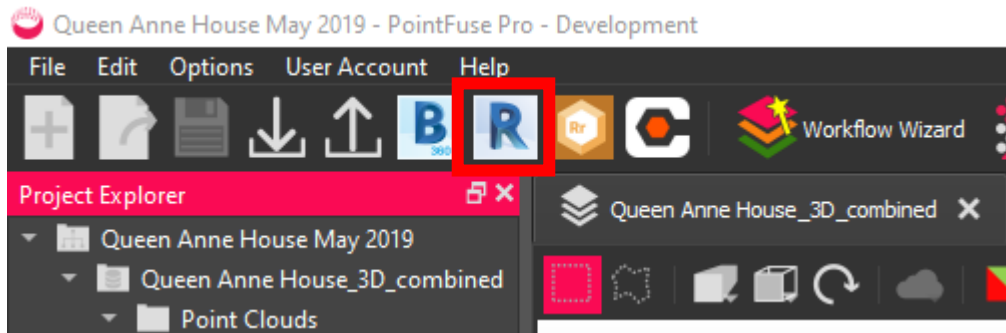
Start PointFuse and open an existing project that contains a classified model.



Right click on the classified model group and choose **Revit Plugin Export** from the drop down.



Alternatively, you can open 1 or multiple classified mesh model supertiles into view, then click the **Revit Plugin Export** option from the top tool bar.



Choose a **file name and save location**. The file type will always be a **PointFuse Revit File Format (.prf)**.

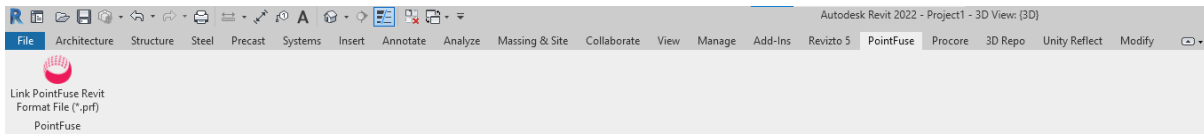
Choose whether you want to export all of the supertiles and also decide which layers to export. **Check on** to export, **check off** to not export.


Press **OK**. The file will be exported to the chosen save location.

Opening the mesh in Revit

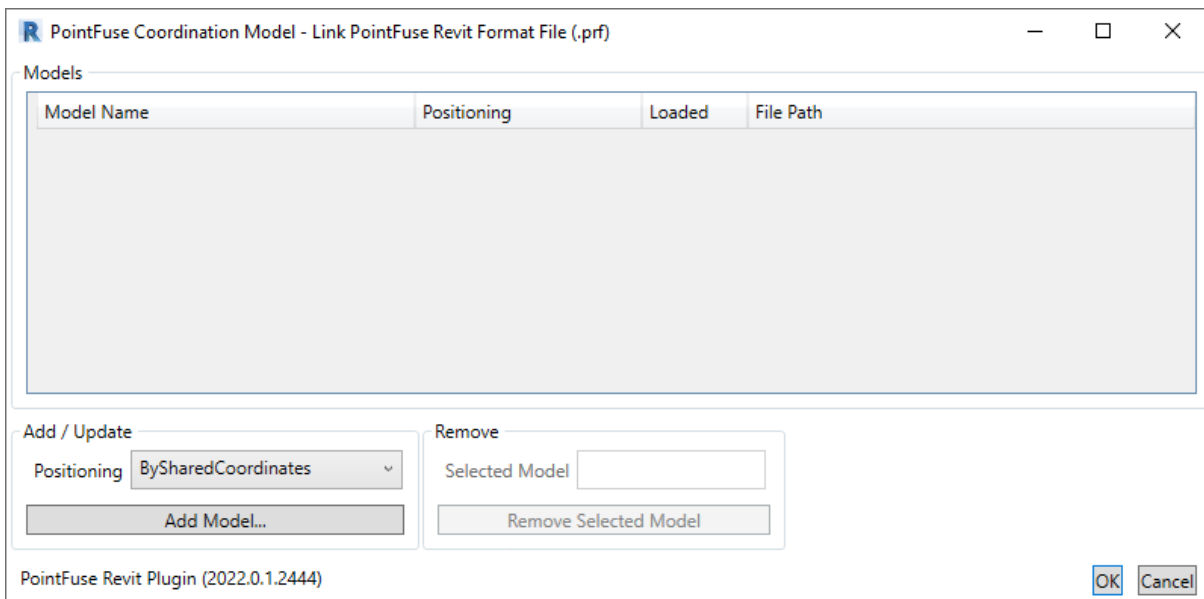
Launch Revit and open an existing Revit Project or create a new project.

Navigate to the **PointFuse** tab along the top ribbon.



Choose “Link PointFuse Revit Format File (*.prf)”  from the ribbon.

This opens the PointFuse Coordination Model dialog box.

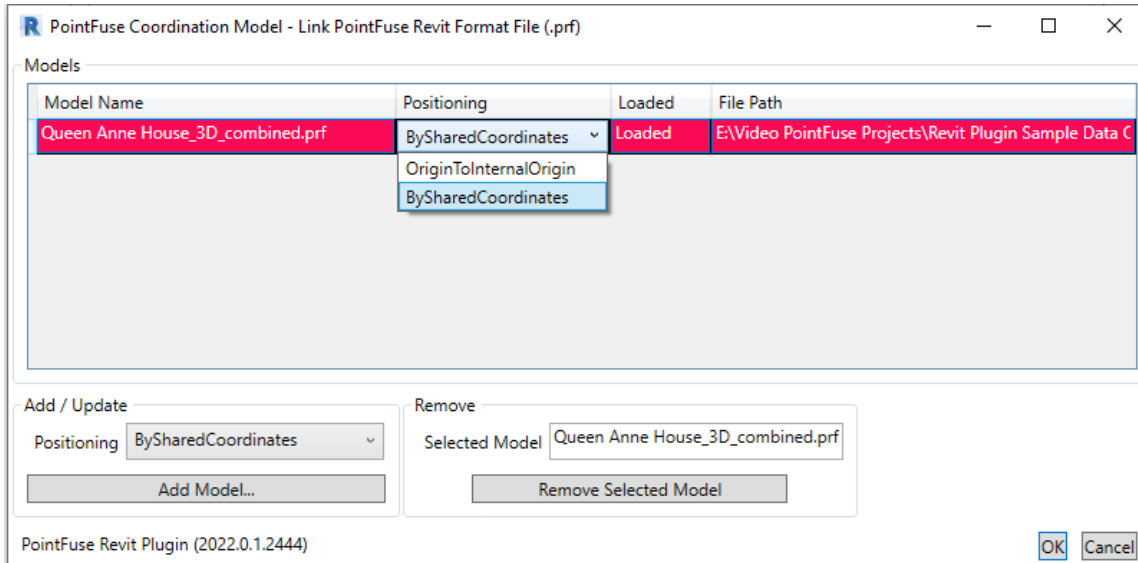


In **Add/Update**, select a **positioning** option. The choices are

- **“BySharedCoordinates”** which will use the coordinates set up in the project.
- **Origin to Origin** which will place the origin of the mesh model at the origin of the Revit Project
- **Centre to Centre** which will place the centre of the mesh model extents to the centre of the Revit project.

Press **Add Model** and navigate through Windows Explorer to the generated *.prf file.

Press **Open** to confirm the selection.



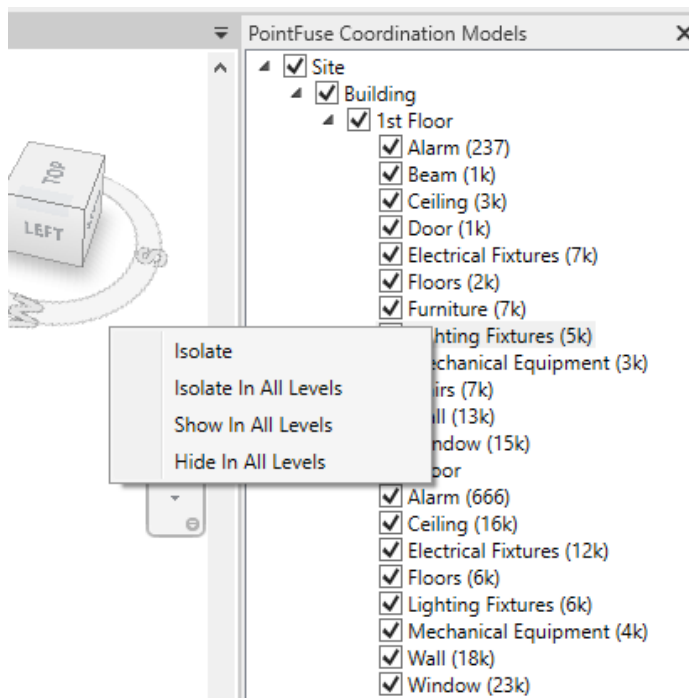
Remove a linked mesh model by selecting on it in the list of Models and pressing **Remove Selected Model**.

Adjust the Positioning of the mesh by selecting on the entry in the **Positioning** column. This will bring up a drop down of the choices.

Press **OK** and mesh model will be linked into the project.

Using the loaded mesh

Once loaded, a window will appear on the screen entitled **PointFuse Coordination Models**, containing a list of the layers that are present within the model.



Toggle the visibility of layers using the check boxes, or by using the right click menu. The options here are:

- **Isolate** – This will isolate the chosen layer, switching all other layer’s visibility to off.
- **Isolate in all levels** - This will isolate the chosen layer, plus any other layers of the same name contained elsewhere in the hierarchy, switching all other layer’s visibility to off.
- **Show in all levels** - This will switch the chosen layer’s visibility to on, plus any other layers of the same name contained elsewhere in the hierarchy.
- **Hide in all levels** - This will hide the chosen layer, plus any other layers of the same name contained elsewhere in the hierarchy.

If the model displays in black, rather than with the classification colors, toggle the view model to **Shaded**.

