Steel Connections Software Development Toolkit

Welcome to the Steel Connections Software Development Toolkit 2024! This package includes documentation, samples, and development details that support the creation of steel connection elements for Autodesk Revit.

**Contents**

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| **Folder** | **File** | **Description** |
| **Steel Connections SDK** | ReadMeFirst.docx | This document contains the packing list for the SDK and a brief background of the SDK. |
| Steel Connections .NET API Developer Training Guide.docx | The training guide document contains details about development basics using the Steel Connections .NET API. This is the place to start when you get familiar with the API using the .NET technology. |
| Steel Connections COM API Reference Guide.doc | The reference guide for all the COM libraries that are required to develop your own steel connections. |
| **Steel Connections SDK\Samples\Projects** | SteelConnectionsSamples.sln | Single workspace containing all the sample projects. |
| Samples folder | A few functional example projects using the Steel Connections API. Each project shows an example of how to build and run your own steel connection. |

**Steel Connection API Background**

Steel Connections are a set of libraries that originated from an AutoCAD vertical product named Autodesk Advance Steel. These libraries were part of a larger set of steel connections called joints in Advance Steel, together with many other product functionalities.

The Steel Connections package was integrated into Revit to boost productivity. This way, unique steel connections can be created, saved, and reused on future projects.

As Revit and Advance Steel run in different contexts and are based on different development and running principles, the following need to be mentioned:

* Revit and Advance Steel share the same steel connections engine. Therefore, there are some features that only make sense in Revit and others that only make sense in Advance Steel.
* As the core engine of Advance Steel runs inside Revit when creating and modifying steel connection elements, the two APIs have many common features.
* Most of the interfaces, classes, and methods from this API can be safely used in Revit as mentioned in the development training guide documents.
* Currently this API has some interfaces, classes, and methods that can be used only in Advance Steel and not in Revit.
* Using this API you will often notice the term *joint* (used in Advance Steel) which is a synonym for *steel connection* (used in Revit).
* There are classes and methods which have notes in the Steel Connections COM API Reference Guide reflecting the fact that those API elements are not available in Revit, but only in Advance Steel.