2.2 IFC Import

The rapidly increasing technical development in the construction industry is leading to a great demand and requirements for digital data exchange of building models. From version 27, cadwork offers you extensive options for data exchange with the IFC and BCF schema. However, this document only deals with the latest version. Cadwork is certified for data exchange according to the following list:

Vendor	Product	Schema	Exchange Requirement	Import / Export	Status
cadwork Informatik	cadwork 3D	IFC4	Structural Reference Exchange	Export	Finished
cadwork	cadwork 3D	IFC 2x3	CV2.0-Struct	Export	Finished
cadwork Informatik	cadwork 3D	IFC4	Structural Reference Exchange	Import	In Progress

List of certified software

When dealing with IFC data, the file schema, the version of the schema, the model view definition and knowledge of the structure of the file are crucial. The next sections explain how to use the IFC schema in cadwork.

Add IFC files

IFC files are imported into cadwork via the BIM Manager. The BIM Manager is the central tool for working according to the BIM method. All associated dialogs can be opened from here and all related settings can be made. Open the BIM Manager either via the "Storey/BIM Manager" button in the status bar or via the Windows menu bar; *Window -> BIM Manager*. IFC files can be added either via the "+" symbol or with the «Drag and Drop» function (multiple files possible).

Imported elements are read in as an "**Exchange object**", which is only used for visualization. They cannot be displayed in a 2D plane or exported to a shop drawing. They can also not be modified or used for collision control. The exchange objects should not be used as reference components. The required accuracy is only achieved after the elements have been converted.

Activate Exchange objects

The Exchange objects can be selected with «Activate by attribute». For example, you can use the `Ctrl` + `A` functions to activate only the Exchange objects by attribute

that you want to convert to cadwork components:

Attribute	Keyboard shortcut
IFC type	`Ctrl` + `A` -> `Shift` + `T`
Storey	`Ctrl` + `A` -> `Shift` + `S`
Building	`Ctrl` + `A` -> `Shift` + `A`
IFC layer	`Ctrl` + `A` -> `Shift` + `Q`
Name	`Ctrl` + `A` -> `N`
Material	`Ctrl` + `A` -> `M`
Color	`Ctrl` + `A` -> `C`