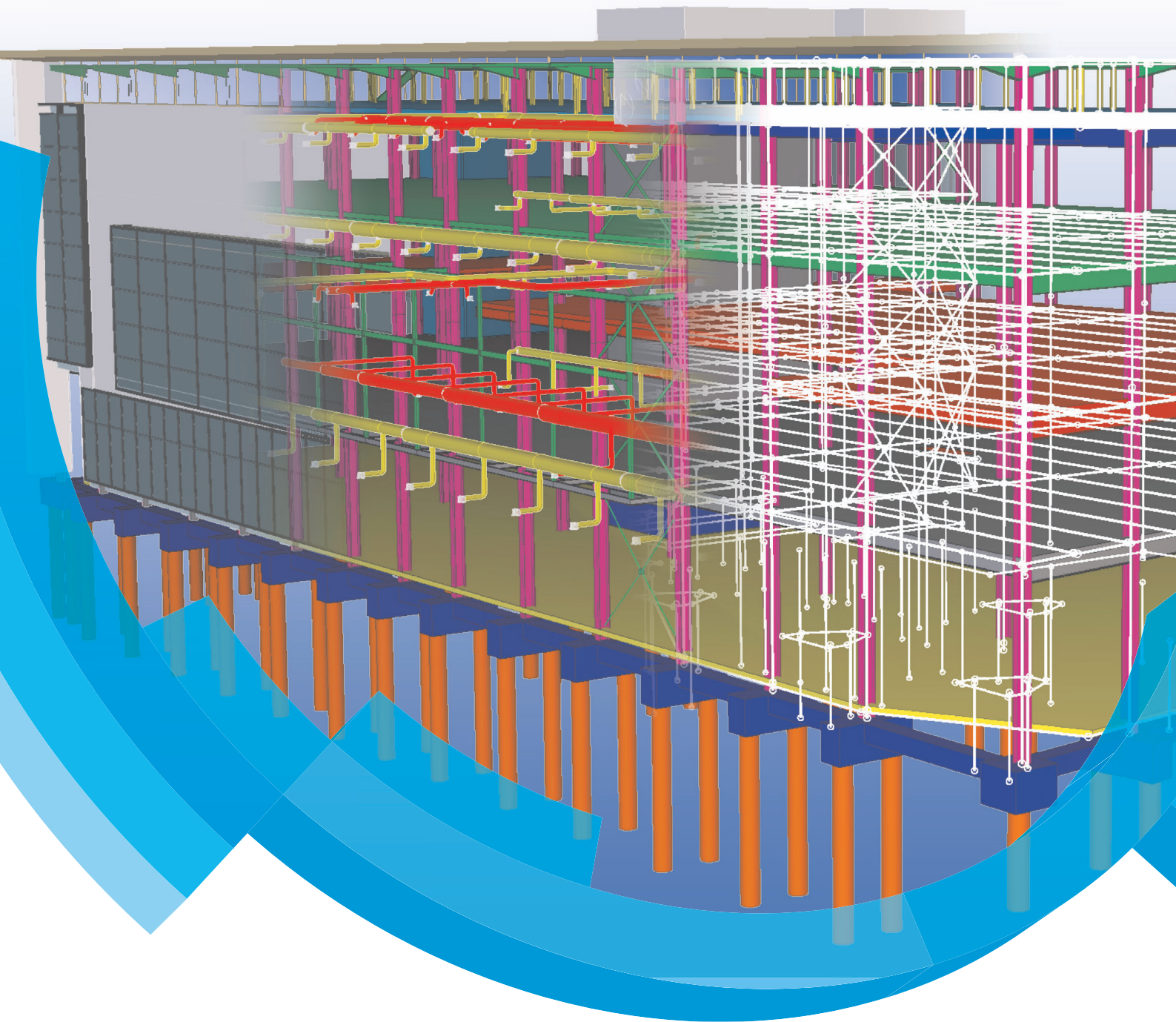




Construsoft Auto Surface Replacer for SketchUp



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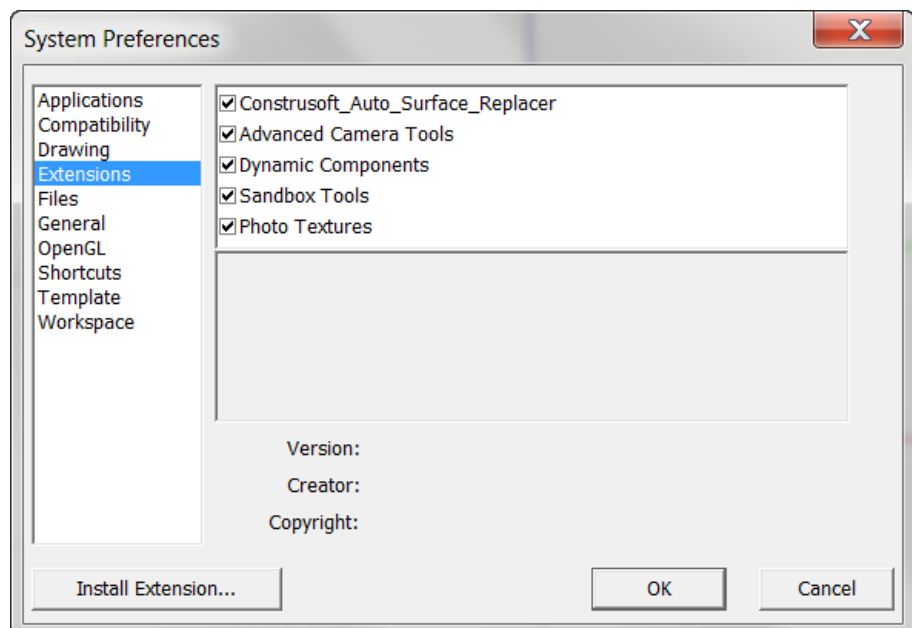
Construsoft Auto Surface Replacer for SketchUp

Purpose

Adjust the representation of a SketchUp model (exported from Tekla Structures) fast and easily so that it is represented realistically in SketchUp.

Installation manual

1. [Download](#) the file **Construsoft_Auto_Surface_Replacer.zip**, unzip the file and save the installation file on any location.
2. Open SketchUp and go to the pull-down menu **Window > Preferences**. The dialog box **System Preferences** appears:



3. Go to the category *Extensions* and click **Install Extension...**
4. Browse to the installation file ***.rbz**
5. Select the file and click **OK**, the tool **Construsoft Auto Surface Replacer** will now be added to SketchUp.

In the plugin directory of the SketchUp installation

...:\Users\<user>\AppData\Roaming\SketchUp\SketchUp
2015\SketchUp\Plugins

the folder **Construsoft_Auto_Surface_Replacer** and several subfolders are created.

In subfolder: *./Resources/Data* the default (empty) conversion table
tekla_conversion_table.csv is generated.



This file must have full permissions!

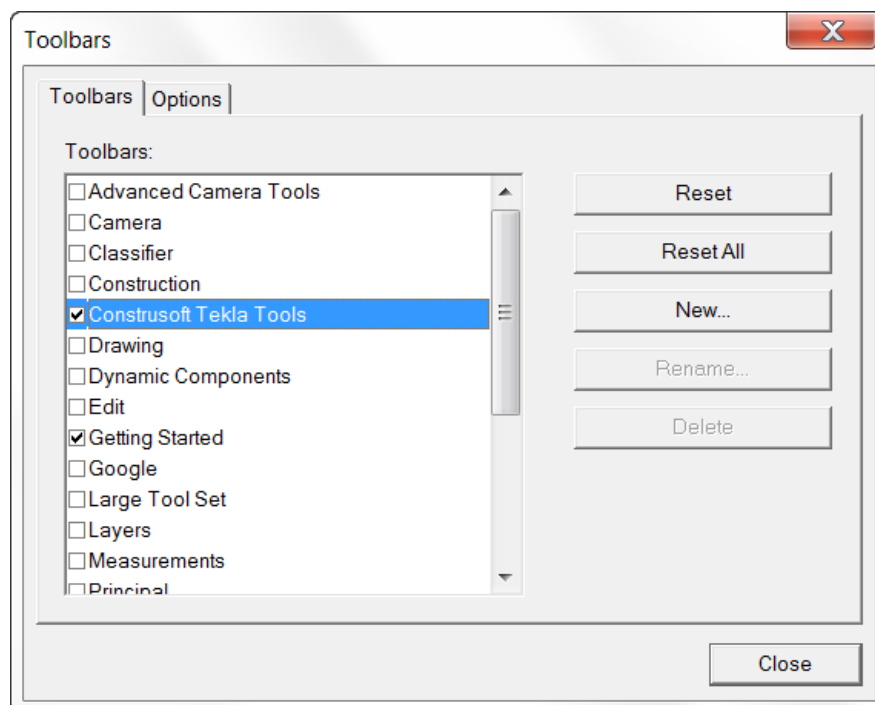
6. Open this file by using any text editor (e.g. Notepad).

In here you can set an alternative Material/Structure for each combination Partname and/or class. This name must be identical to the materialname as it is used in the Paint Bucket from SketchUp. (Defining a pathname is not required).



After installing the tool **Construsoft Auto Surface Replacer**, a new menu **Construsoft > Construsoft Auto Surface Replacer** is added to the pull-down menu **Extensions** in SketchUp.

Also a toolbar appears; the toolbar can be dragged and dropped to any position. If the toolbar does not appear automatically, go to the pull-down menu **View > Toolbars** and set the check box *Construsoft Tekla Tools*:



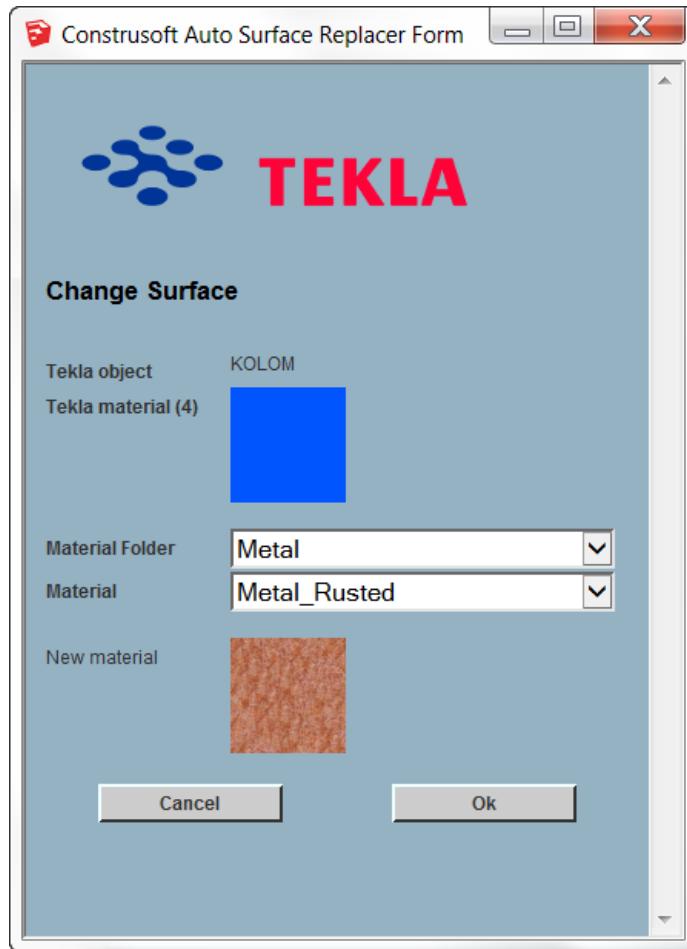
You can start the conversion routine via the pull-down menu or via the toolbar. The plugin works as follows:

1. Open the *.skp model on the regular way as it is generated from Tekla Structures.
2. Click the icon or go to the pull-down menu. The plugin goes through the following steps:
 - First, there is a search for all parts to the (new) Componentname/materialcombinations. Next, these are completed in the conversiontable.
 - After that, the plugin again runs through all components and now checks for all surfaces if they include any material that must be replaced on base of the conversiontable.
 - If the concerned material does not occur in the model yet, it will be transferred automatically to the materiallist of the model.



Possible errors appear in the dialog box **Ruby Console** in SketchUp. You can show this dialog via the pull-down menu **Window > Ruby Console**.

The conversiontable can also be adapted in SketchUp. For this, select one object, click the right mouse button and select the command **Change Material**:



In the list boxes **Material Folder** and **Material** you can select the desired material and color/structure.

If desired, you can add you own materials and structures. You can find additional information about this in the SketchUp Knowledge Center.

Next, the chosen material will be written in the conversiontable for the concerned part. If the plugin runs again, the new lines are considered and all objects will be colored according to the predefined properties.

Example conversiontable

There is a block for each elementname including lines ending on "*" or a number. This number is the class that has been used in Tekla Structures. A "*" line can be used for all elements, regardless to their colorcode.

The SketchUp "texture" must be defined between | ----- | .

Example

```
>Hash|BEAM
#BEAM|Hash|String|Metal_Rough|*
<Hash|BEAM
```

