# A SHORT DESCRIPTION 'HOW TO USE THE **R**ICH**S**ECTION PLUGIN FOR SKETCHUP'

PLUGIN VERSION V0.4.6 (evolution possible for other versions)

abbreviation RS = RichSection

# Create a RichSection



- Hit the button

or select the menu 'Plugins/RichSection/Create RichSection'

- Place a section plane: Move the mouse over faces to change the direction of the futur section plane. Hold the shift-key to block the direction. Left mouse click to place the section plane. The parameters-panel will open.
- Change the parameters as desired. See below for more information about the parametes. For big models (many faces, many edges) start with 'Projection' switched off.
   Select the OK-button to close the parameters panel
- WAIT UNTIL ONE, TWO OR THREE SCENES\* are created
  <u>If you don't move the mouse</u>, a text wil pop up near the mouse cursor, after the creation of the section (= the end of the command) :

'RichSection : XX faces cut and YY edges projected in ZZ seconds'

\* If the model doesn't contain any scenes, a scene aView will be created with the actual settings (camera, layers, .....). This scene permits to switch back to a normal view, without RichSection elements.

\* Then one or two scenes wil be created (depending on the settings in Menu Plugins/RichSection/ Setting). If this is the first RichSection and the option was 'auto' for name, then the name of the RichSection will be '#001' and the scenes will be named #001 and #001\_.

# **Update RichSection**



- Hit the button 🏁
- Updating only one RichSection : Select the section-plane or the 'RichSection'-cut.
  The RichSection elements (cut faces, cut face-nature and projection lines), will be updated : they will change if model, layers or materials-library have been changed.
- Updating all RichSections : Hit the [CTRL] button or [COMMAND KEY] on MAC. All sections will be updated.
- You wil have to confirm (OK / CANCEL) if there are more than 3 RichSection, or if the estimated calculation time is longer than 3 seconds.
- If confimation has been asked, a message box will report the calculation time for each RichSection. If no confimation has been asked, and i<u>f you don't move the mouse</u>, a text wil pop up near the mouse cursor, after updating, reporting :

' XX RichSection updated in YY seconds'

# **Parameters RichSection**



- Hit the button

or select the menu 'plugin/RichSection/Parameters (change) Richsection'.

- The parameters-panel will open.
- Change the parameters as desired. See below for more information about the parametes.

# **Delete RichSection**



- Hit the button

or select the menu 'plugin/RichSection/Delete Richsection'.

- Select the section-plane or the 'RichSection'-cut.
- A panel will open with three options :

- delete RichSectionGroup : will delete the RichSection elements and parameters only the Sketchup section will stay unless you select the other options ...
- delete Sectionplane
- delete Scenes and Styles

If necessary layers must be purged => use layers panel or model statistics

# Info on Group or Component for RichSection



- Hit the button 🍀

or select the menu 'Plugins/RichSection/Info on Group or Component for RichSection'

- Select the section-plane or the 'RichSection'-cut in order to define (or change) the concerned RichSection. If this step is omitted, the last used RichSection will be used.
- Select (a face in) a Component(instance) or Group
- A panel will open explaining witch RichSection material will be assigned for this RichSection element and why (if a section-face can be created = if the section can produce a closed polygon). This will depend on all the layers (RS section material by prefix+layername) or materials (RS section material by prefix+materialname) of the (nested) groups or components containing the selected element, and also the existing (section)materials in the model.

### Legend Creation



Hit the button 💴

or select the menu 'Plugins/RichSection/Legend Creation'

- TO BE COMPLETED, sorry .....

# Parameters panel (used in 'creation' and 'change parameters')

RichSection : Options : V0.4.6-2014.07.13-01:00 DEMO : (Last calculation in 0.03125 seconds)		
RICHSECTION name	auto	_
SECTION	Yes	•
RS section material name	prefix+layername, default	•
RS section material, prefix	#	_
default RS section material	#default	Ŧ
display RS section line	No	Ŧ
SU section line width	3	•
SU section line color	Black	•
layers to section: All / Visible / from Scene	all layers	•
PROJECTION	No	•
projecting	Facing	Ŧ
include soft + smooth	No	•
projection depth (0) = no limit)	no limit	_
projection line style	Long Dashes Line	•
projection line color	Black	•
layers to project: All / Visible / from Scene	all layers	•
RICHSECTION automatic update	Yes	•
RICHSECTION update now	Yes	-
OK Cancel		

RICHSECTION name : Name for this RichSection, this name will also be used for the scenes and layer created for this RichSection, Keep it short or use 'auto', witch will produce the names #001 #002 ... SECTION : YES/NO : defines if section-faces have to be produced

**RS section material name :** Defines witch material will be assigned to this section face according to the following options and rules :

### prefix+layername, default (selected option)

If a group (or componentinstance) is in layer 'Layer1' and the prefix is '#' : Then the plugin will look for the RS material '#Layer1'. If it exist in the Model (<=> in the library), it will be assigned. If not, the RS material assigned to the cut-face will be 'default' witch means that the RS material of the Component(instance) or Group containing this nested element will be used. If no corresponding RS material can be found, the default RS material will be used, witch is '#default' in the above panel example.

### prefix+materialname, default (selected option)

If a group (or componentinstance) has material 'Brick1' assigned and the prefix is '#' : Then the plugin will look for the RS material '#Brick1'. If it exist in the Model (<=> in the library), it will be assigned. If not, the RS material assigned to the cut-face will be 'default' witch means that the RS material of the Component(instance) or Group containing this nested element will be used. If no corresponding RS material can be found, the default RS material will be used, witch is '#default' in the above panel example.

### prefix+layername, prefix+materialname, default (selected option)

If a group (or componentinstance) is in layer 'Layer1', material 'Brick1' is assigned and the prefix is '#' : Then the plugin will look for the RS material '#Layer1'. If it exist in the Model (<=> in the library), it will be assigned. If not, the plugin will look for the RS material '#Brick1'. If also this material doesn't exist in the Model, the RS material assigned to the cut-face will be 'default' witch means that the RS material of the Component(instance) or Group containing this nested element will be used. If no corresponding RS material can be found, the default RS material will be used, witch is '#default' in the above panel example.

**RICHSECTION name** : Name for this RichSection, this name will also be used for the scenes and layer created for this RichSection, Keep it short or use 'auto', witch will produce the names #001 #002 ...

RS section material, prefix : prefix used : see 'RS section material name' above

- **display RS Section line :** Display borders of section faces. Off by default, Sketchup produces already section-lines, witch can't be switched off.
- **SU section line width:** Changes line width of the Sketchup section lines (are also defined in the style). This changes the style.
- **SU section line color:** Changes line color of the Sketchup section lines (are also defined in the style). This changes the style.
- **layers to section (All / Visible / Scene)** : Defines if sections-faces are only produced for groups in certain layers. A scene can be created to define the list of the layers for witch a sectionface has to be produced. You can exclude e.g. hi polygon elements (trees) or other elements that doesn't need sectionfaces.

### TO BE COMPLETED, sorry •••••