Skalp for SketchUp 1.0: Getting Started

for SketchUp 2014

Please understand that your purchased License will NOT expire.
It is just the BETA builds of Skalp that we need to force an expiry upon in order to make sure you are running a recent version. During BETA, features may undergo changes. Make sure to read the Release Notes section at the end of this document for more information. Thanks for your understanding.

Skalp for SketchUp 1.0: Getting Started for SketchUp 2014

Table of Contents

Introduction

This document covers the basics to get you started with Skalp,
the next exciting must-have extension to SketchUp 2014.

We hope that you'll like using Skalp and find this document informative.

If there is anything that you feel should be be corrected, please let us know as we are passionate about providing a great experience.

Enjoy!

About Skalp for SketchUp 1.0

Skalp has been designed and built as an easy to use yet powerful Live Section Tool.
It represents the key missing features needed to realize a long standing dream: Create your stunning plans and elevations inside SketchUp.

The Skalp development Team has its roots in architecture and 3D software, but that doesn't mean Skalp is for architects or Pro users only.
SketchUp is being used in so many disciplines nowadays. Which is why we intended Skalp to be as 'generic' as possible. This means we do not want to change or disrupt your specific workflow. We feel Skalp should just try to respect whatever and however you're doing in SketchUp and simply boost your ability to create superb drawings.

As for the future of Skalp, we thank everybody who has purchased, spoken to us or helped us in any way. We plan to continue improving Skalp in many ways whilst keeping an affordable upgrade path. We always welcome new suggestions. If you'd like us to add or change something, by all means feel free to contact us.

Thank You!

The Skalp Team

Contact

To purchase Skalp and/or Skalp Pattern Designer, please visit:

http://www.skalp4sketchup.com

Support questions: support@skalp4sketchup.com

Questions on your purchase: sales@skalp4sketchup.com

Reseller inquiries: reseller@skalp4sketchup.com

Features

Skalp Sections

- Automatic hatch **patterned** cross sections.
- **Live** updates, all model changes are tracked on the fly.
- Use Styles to remap the look in each scene.
- Fully supports **nested** groups and components.
- Supports multiple drawing **scales** in one model.
- Neat user interface filled with relevant features.

Skalp Styles

- The same Section **represented** in multiple ways.
- Each Scene can have its own cross section style.
- Intuitive and powerful mapping **queries**.
- Assign by layer, material, hatching or tagging.
- Patterns adapt to the **drawing scale**.

Skalp Pattern Designer

- Make awesome **tileable** Pattern textures for your Skalp Sections.
- **Texturize** your model in a new creative way.
- Import standard **CAD patterns**.
- Build your own patterns from scratch.
- Supports scales, transparency, colors & line widths.

Skalp Export

- Support for SketchUp Pro's **LayOut:** Persistent updates of Skalp sections in all scenes.
- Export to DXF includes real CAD **hatch patterns**.
- Batch export of scenes to **DXF**.

1. Preparing Skalp

1. System requirements

- SketchUp Make 2014 or SketchUp Pro 2014

- Mac OSX 10.9.x + Safari 7.x
  OR
- Microsoft Windows Vista, 7, 8 or higher + Internet Explorer 10 or higher

  SketchUp 2014 is not fully supported under windows XP
  http://help.sketchup.com/en/article/36208

  Please do not attempt to run Skalp on earlier SketchUp versions, this will not work and is not supported.

2. Installation Notes

1. We recommend logging into your computer as an admininstrator before installing Skalp for SketchUp. This will make the installation go more smoothly and ensure that files get installed in the proper places.

2. Select: **Window > Preferences** (Microsoft Windows) or **SketchUp > Preferences** (Mac OS X). The Preferences dialog box is displayed.

3. Click on **Extensions**. The Extensions panel is displayed.

4. Click on the **Install Extension** button. The Open dialog box is displayed.

5. Locate the **Skalp.rbz** file to install.

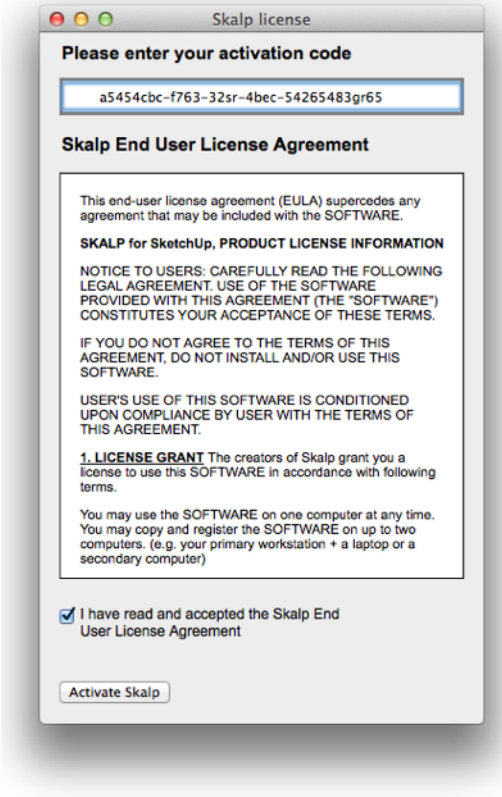
6. Click on the **Open** button. Skalp should appear in the list of extensions and is ready to be activated.

   More information on installing plugins in SketchUp:
   http://help.sketchup.com/en/article/38583

3. First Run / Activating Skalp

1. Skalp needs to be activated upon first run.
   An **internet connection** is needed ONCE for this process to succeed.

Click on one of the
Skalp Toolbar icons.



You will be presented with a dialog where you need to fill in or paste your
license activation code:

xxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx

This code was sent to you via email upon purchase.

Read the Skalp End User License Agreement and **Check to Accept**.

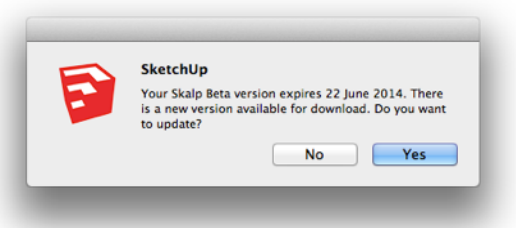
click on **Activate Skalp**

2. Skalp will try a **fully automatic activation**.
    1. In case this doesn't succeed an email is sent to you with your '**Skalp.lic**' license file. The license file then needs to be placed manually as follows:
    2. C:\Users\YOUR USERNAME\AppData\Roaming\SketchUp\SketchUp 2014\SketchUp\Plugins\Skalp\Skalp.lic (Microsoft Windows)
    3. /Users/YOURNAME/Library/Application Support/SketchUp 2014/SketchUp/Plugins/Skalp/Skalp.lic (Mac OS X)
    4. To navigate to this hidden folder on Mac OS X: Open a new Finder window, **press and hold the Option** (left alt) key on your keyboard, the click **Go** in the menu bar
       > Library > Application Support > SketchUp 2014 > SketchUp > Plugins
3. Skalp is now ready to use.

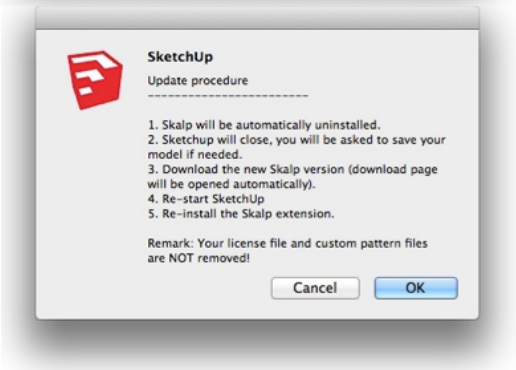
4. Updating to a new Skalp version

5. Upon start, Skalp checks to see if a new version is available for download.
   If this is the case a dialog will ask you wether you wish to update or not.

   In case your current Skalp version is a BETA version, its EXPIRY DATE is also shown. We strongly advise you to update Skalp before this date passes as you will have to manually update otherwise.



6. If you accept, a second dialog will explain the process that is about to happen.
   Skalp will clean your current installation.
   Your 'Skalp.lic' license file and any custom hatch patterns will NOT be removed.



7. After a successful uninstall you will be redirected to the Skalp Product Downloads page in your web browser. From there you can always download the latest version. After successfully downloading you have to reinstall Skalp as described in the **Installation Notes**.
   MAKE SURE TO CLOSE AND REOPEN SKETCHUP BEFORE REINSTALLING SKALP

8. In case your **Skalp BETA has EXPIRED** you need to reinstall Skalp manually.
   Start by uninstalling Skalp:
   - open the Ruby Console from SketchUps menu and enter 'Skalp.uninstall' (without the quotes). Hit enter. The Console should now state 'True', indicating Skalp has been successfully uninstalled.
   - close and reopen SketchUp and proceed with the Skalp installation as explained under 'Installation Notes'.

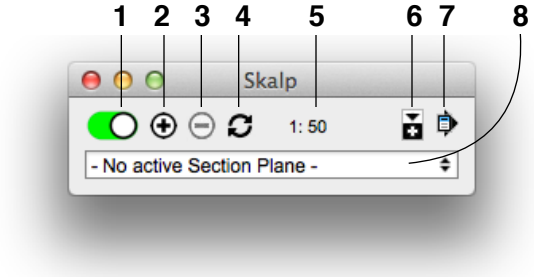
   You can manually download the latest Skalp version from:
   http://download.skalp4sketchup.com/downloads/latest

Please understand that your purchased License will NOT expire.
It is just the BETA builds of Skalp that we need to force an expiry upon in order to make sure you are running a recent version. During BETA, features may undergo changes. Make sure to read the Release Notes section at the end of this document for more information. Thanks for your understanding.

2. Start Using Skalp

1. User Interface Overview

Click on the Skalp Icon in the Skalp Toolbar to bring up the main Skalp dialog:



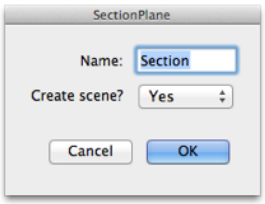
1. Activate / Deactivate Skalp Sections

This green/red slider button manages the section visibility. It does this by activating/deactivating the SketchUp section and by turning on/off the special purpose Skalp layers.

If you want to 'remember' this setting on the active scene, you have to use '**Save Skalp Settings to Scene**' (7).
When this slider button is RED and you cannot turn it to GREEN, this indicates no Skalp Section is available in the model and you have to create one first (2).

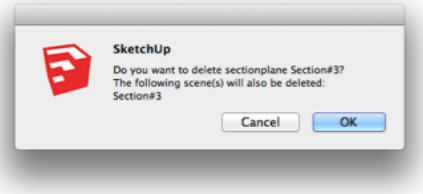
2. Add a new Skalp Section

Adds a new Skalp enhanced SketchUp section plane to your model. After placing the section plane, a dialog allows you to **enter a name** and **create a new Scene** to be associated with the Section. The Scene creation is optional. Skalp Sections can be associated to a Scene later from the main Skalp dialog as well. Multiple Scenes can be associated with one and the same Skalp Section. See 'Using Scenes to manage Skalp Section visibility'



3. Delete a selected Skalp section

   Deletes a Skalp section and removes all Scenes that are associated with the selected Skalp section. (see 'Using Scenes to manage Skalp Section visibility' to manage Skalp scene association.)



4. Force Update a Skalp section

   Can be used to recalculate a section. Mainly needed when you have turned OFF Skalp auto updating from the preferences in the menu. Normally not needed if automatic updating is ON.

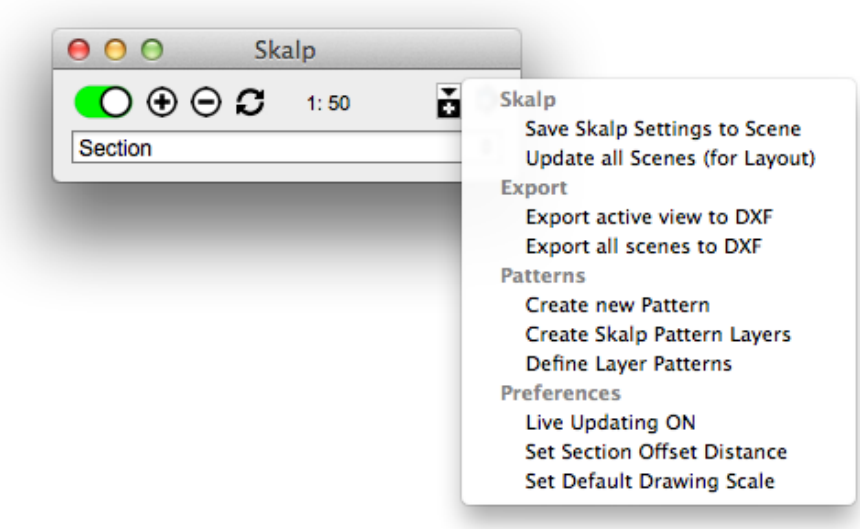
5. Drawing Scale

   Sets the Scale at which you intend to print the selected Scene. This influences the size and resolution of the patterns generated by the Skalp Pattern Designer.

6. Show More

   Opens up the lower part of the dialog to show the 'Skalp Styles' editor.
   See 'Skalp Styles'

7. Skalp Menu



- Save Skalp Settings to Scene

  Stores the active Skalp Section Plane and its scale settings in the current scene.

- Update all Scenes (for Layout)

  Updates all Skalp Sections in all scenes. Brings all scenes in a consistent state, accessible even when Skalp is unavailable. This is useful for models in Layout or to hand over your model to clients that don't have Skalp.

- Export to DXF

  Saves a 2D DXF file of the Skalp Section into the same directory where your model is saved.

- Export all scenes to DXF

  the same as 'Export to DXF' but for all scenes at once. (not yet implemented in BETA)

- Create new Pattern

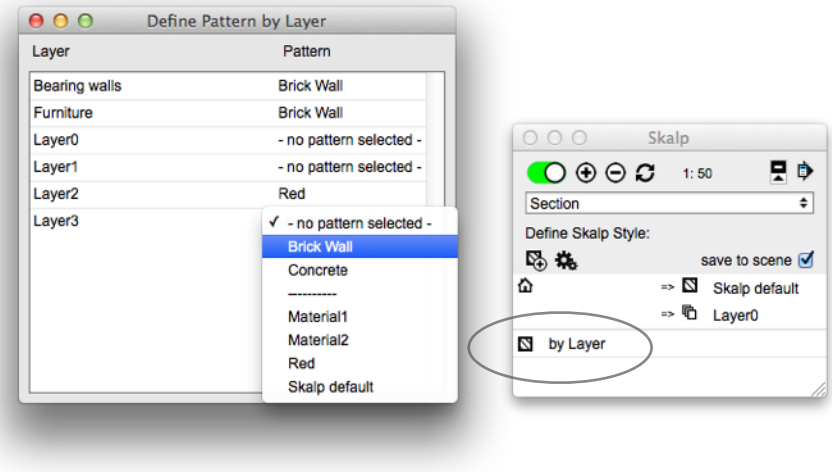
  Opens the Pattern Designer Dialog

- Create Skalp Pattern Layers

  Creates a separate layer named 'Skalp Pattern Layer - <pattern name>' for each Skalp Pattern. This method is intended for advanced use of SketchUp's Color By Layer function. See Skalp Styles.

- Define Layer Patterns

  Opens a dialog that allows permanent mapping of Patterns to SketchUp Layers. To use this mapping add a line 'by Layer' to your Skalp Style.This mapping information gets stored directly to the Layers in your active model.
  When you save your model as a template, new models based on this template will inherit this mapping.



- Preferences, Live Updating ON/OFF

  Toggles Skalp's automatic updating. Leave this ON under most circumstances. This option is intended to turn of Skalp's automatic updating in case it would slow down your workflow too much. (e.g. on really big or complex models.)
  When this option is turned OFF, you have to 'Force Update' (4) the Skalp Section manually. It is always a good idea to try to find and reduce the source of your model being 'slow' before reverting to switching this option to OFF.

- Preferences, Set Section Offset Distance

  Determines the 'depth' distance at which the Skalp section groups are offset from the standard Sketchup section plane. It depends on your model size and your computer's 3D depth resolution how small you can set this offset before you begin to see parts of the Section result getting clipped. (e.g. on a recent macbook pro retina 0.1mm would be ok, on older hardware we recommend at least 1mm).

- Preferences, Set Default Drawing Scale

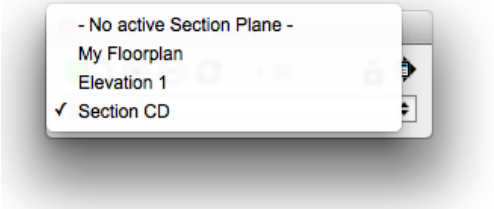
  Stored Drawing Scale (5) preference that Skalp will use when it is loaded next time.

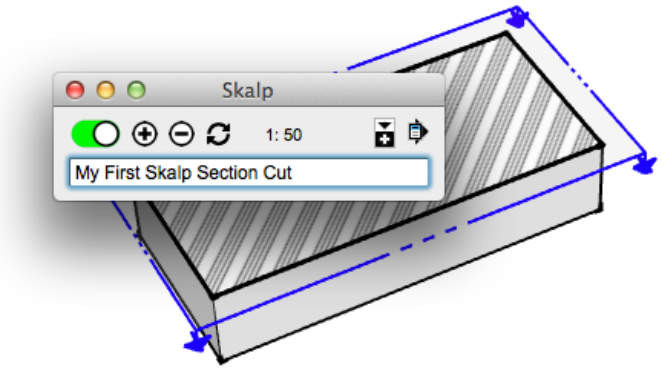
8. Skalp Sections Drop Down list

Drop down list to directly access all Skalp Sections in this model. Works in two directions: Either select a Skalp section from the list to activate the Section, or select a SectionPlane in the model and use this field to enter or change its name.

Hit 'Enter' to confirm the new name.

After activating or deactivating a section from the list you might want to store this setting onto you active scene by using 'Save Skalp Settings to Scene' from the menu (7).





2. Understanding and Using Skalp Sections

A Skalp Section is an 'enhanced' SketchUp section.
It adds **LIVE updating** and **styled solid FILLS.**

What exactly does this mean, and how is this accomplished?

1. Section Fills

In essence, Skalp searches and selects particular sets of faces from the model, intersects them with the section plane and looks for 'closed loops' in the results to fill.

Only closed loops can get filled.

Skalp will track and process your model 'context by context'.
A 'context' is a Group, a Component or simply the Model itself.
So, the process starts by taking your top level context: the model itself.
Next, Groups and Components are taken one at a time.
The resulting 'fills' will be updated and placed into one managed group in your model.

While not necessary, it is good practice to try to create components and groups that are 'manifold', 'solid' objects. These objects will be processed faster and are likely to produce cleaner section results. If a selected object reports a 'Volume' in the entity info dialog, this indicates it is a valid solid object.

Skalp does track nested objects. That is: groups or components inside other groups or components. So organizing your model in smaller nested groups/ components might help getting better section results.

In order to further maximize Skalp's potential and taylor it to you specific workflow you can step it up and have special Patterns and/or hatches mapped onto a Skalp section. This can be done using a wide range of workflows, explained in more detail under 'Styling your Skalp Sections'.

2. LIVE updating

By default Skalp Sections update automatically when needed. Skalp will track and process all drawing entities in your model. Whenever something changes, Skalp will either directly update or, in some cases wait for the next opportunity to update. For example: If you move something, Skalp will wait for the move tool to end. This is done because SketchUp allows you to specify a distance after after a move operation. This behavior would be broken if Skalp would interfere to soon, so it waits until another tool starts.

> *Tip: Pressing the spacebar after, for instance, a move or push pull operation will change the active tool to the selection tool. This will cause Skalp to update.*

To accomplish 'Live' tracking, Skalp depends on a mechanism in SketchUp called 'Observers'. All kind of actions are tracked in this way:

- Adding, Deleting, Changing; basically all model actions.

Whenever entities in the model, in a group or in a component are modified, Skalp will update the section.

- Switching Scenes will update the active Skalp section plane for that scene
- Turning layers ON or OFF will be reflected in the Skalp section.
- Hiding or showing model entities will be reflected in the Skalp section.
- Moving the section plane itself is also tracked.

You can disable automatic updating as a preference from the menu on the main Skalp dialog. Manual 'Force Updates' are then needed. Under normal conditions it is advised to keep auto-updating turned ON.

Special care is needed to update all scenes if you want to use your model in Layout or show the model on a SketchUp version that does not have Skalp installed. See: 'Update all scenes (for Layout)'

3. Using Scenes to manage Skalp Section visibility

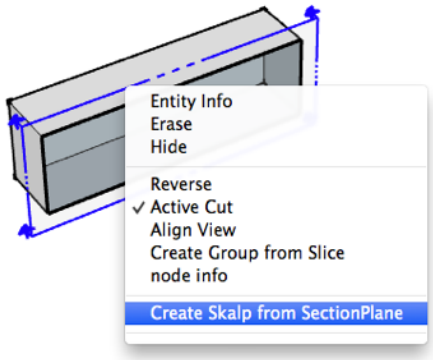
Skalp can manage all layer visibility states in each Scene automatically, provided you follow these rules:

1. **Always use the section drop down list** to select and activate/ deactivate your desired Skalp section.
2. If you want to have NO active Section in a Scene, switch the green/red slider button to **red**, OR select **- No active Section Plane -** in the main Skalp dialog.
3. CRUCIAL: Use '**Save Skalp Settings to Scene**' from the menu to make sure the Section status is 'remembered' in the current scene. This will also save the scale setting to the scene.
4. Remember: there is no need to touch any of the Skalp Layers, ever. If you do so anyway, you may get into trouble.

Following these rules, simply switching to another Scene will properly hide or show the appropriate Skalp sections. (There is a known issue on switching scenes where sometimes you have to click twice on a scene in order to get the Skalp update right. We need to fix this.)

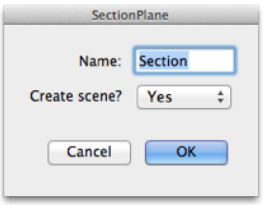
Try it out by opening the layer dialog. Switch Scenes and see what is happening to the layers. All Skalp layers are intended to be automatically managed and should not be changed. Doing so may cause unintended behavior, or you may notice that Skalp simply won't allow interference by restoring the layers state.

4. Convert an existing Section Plane to a Skalp Section



You can convert an existing SketchUp section plane to a Skalp Section by selecting the section plane and then access its context menu by right clicking.

Select '**Create Skalp from SectionPlane**'



A dialog will ask you to enter a **name** for the new Skalp section. You can always change the name later on from the main Skalp dialog.

Optionally you can have Skalp **Create a Scene** and associate it with this Section. This association can also be managed from the main Skalp dialog

edit mode

3. Styling your Skalp sections

1. Introduction to Section Styling

Filling a section is one thing, creating real good looking plans is another.

With Skalp Styles you can step it up.

A Skalp Style is similar to a Sketchup style as it is kind of a recipe to determine the look of a Skalp section.

You can opt to go for some real easy basic scenario's or you can dig in deeper and tailor a style exactly to your needs.

Some examples:
Suppose you need a floor plan at 1:48 with multiple nice hatchings and colors. You can set this up using a Skalp Style, store it on a Scene and have that Scene referenced in Layout.
Now, what if you want to print the same plan on a smaller scale with a simplified preliminary look? Instead of creating a new Section cut you can now simply duplicate the original Scene and directly start tweaking its Skalp Style. The section cut itself will still be live and shared across both scenes.

Maybe you need a construction detail with nice hatchings but then adapted to a larger printing scale?

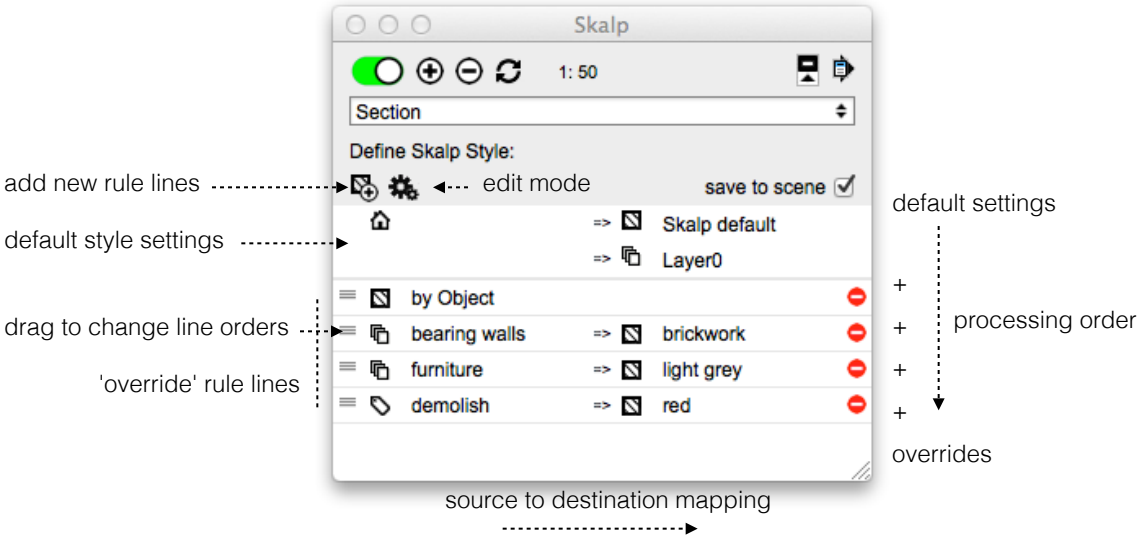
And so on...

This is what Skalp Styling is all about.

Since all SketchUp users have their own way of working, Skalp offers several workflows to adapt and be tailored to your use-case. Practical examples are given in a range from very easy and basic use cases, up to more advanced scenario's. But first let us look at the Style user interface.

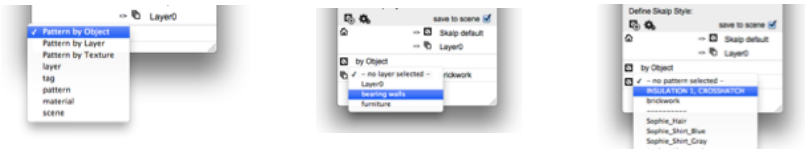
2. Skalp Styles: User Interface

- The white lower part of the Skalp dialog is where the Skalp Styles are configured and edited. You can open this part with the 'show more' icon.
- A skalp Style can be stored on a Scene by checking **'save to scene'**.
- The complete Style 'recipe' is processed line by line, top to bottom.



a Skalp Style, here shown in 'edit' mode.

- The upper two lines represent the default 'home' Section style settings. First A Skalp Style will look at **the entire model** and map the Section cut of all elements to a pattern or texture as set here. A destination Layer can also be set. These settings are always applied, but optional lower rules may still override them.
- Each new line below the default settings zone represents an 'override rule'.
  Add lines using the small 'pattern+' icon
  Lower lines can override higher lines as they are processed last.
  In 'edit' mode, line orders can be changed by dragging them up and down, or lines can be deleted.
- The left side of each rule tells Skalp what to take as input criteria.
  The right side can, for some rules, determine a specific section mapping.
- All style ruling values can be changed by clicking on them (known issue: sometimes you need to click twice to access a list). The small icons can be clicked on as well, allowing you to change their functions.



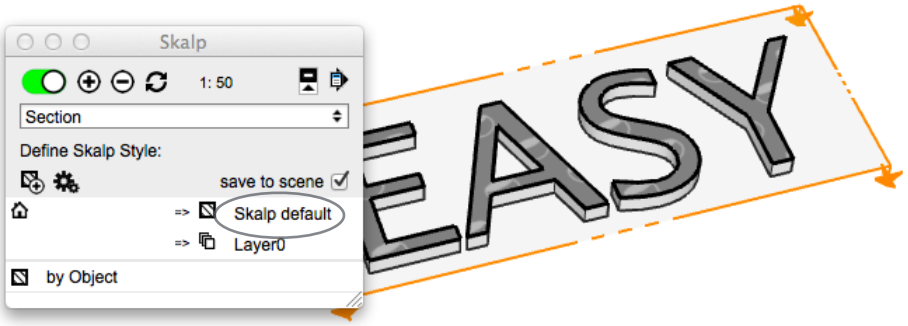
So far for theory, now let's see how this works in practice and what you can do with all this.

3. Styling Workflows adapted to your use case

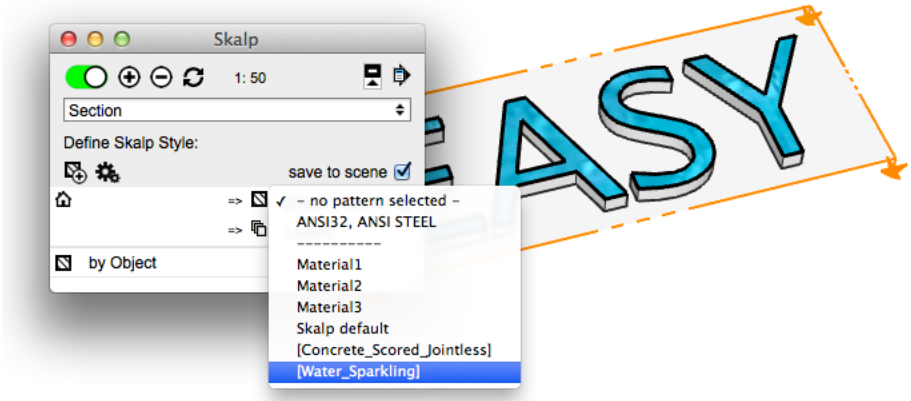
Ranging from the most easy options up to some more advances use cases: here are some examples to get you going.

1. Default Style Settings: one section material (easy)

default style settings ->



When you start using Skalp, you may have noticed your section got filled with the default Skalp Pattern. The reason lays in the default Pattern Style settings. You can change this by clicking on 'Skalp default' as shown:



You may notice your material list will be different. Please see the 'Pattern Designer' section on how to add and manage these Patterns and Materials. What you need to know for now is that beneath the dashed line you see a list of all standard SketchUp textures in your current model. You manage these with SketchUp's material dialog. Above the line is reserved room for the special Skalp Patterns, to be created with the Skalp Pattern Designer.

You can also change the default destination 'Layer0' to another layer. This will place the contents of the section group result on another layer.

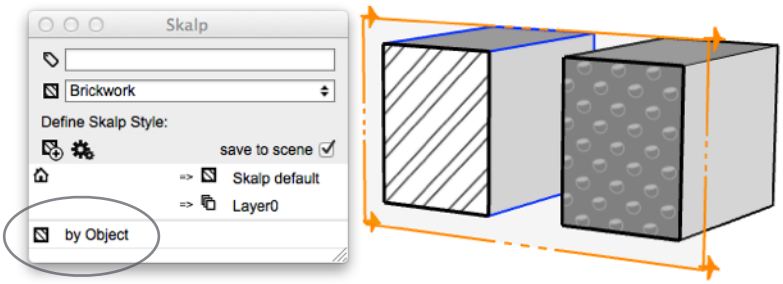
Be default a line 'by Object' is included in this style. This will be explained in a separate scenario. Since nothing is attached to the groups or components in this example, the 'by Object' line can simply be ignored or removed if you like.

2. Styling: Pattern 'by Object'

   This is represents the default workflow.

   The default style setting will first map everything in the section to the 'Skalp default' pattern on Layer0.
   Then the 'by Object' rule kicks in and overrides this for all objects that have Patterns setting attached to them.

   Each object can have its own Pattern attached. See 'Assigning Section Materials to objects'



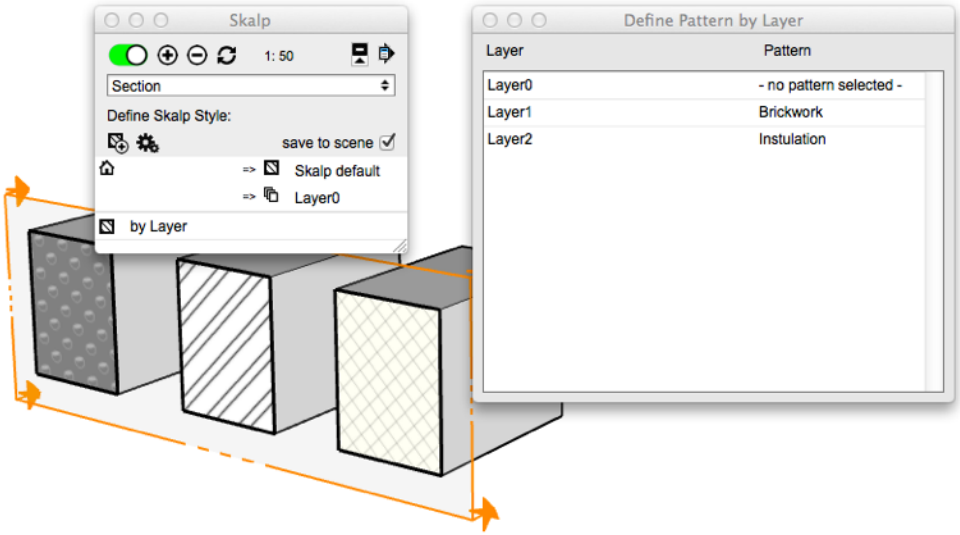
   In this example the block on the left is selected and has been assigned a 'Brickwork' pattern. The block on the right has nothing attached to it and so it will be affected by the default style settings.

3. Styling: Pattern 'by Layer'

   If you organize your models mainly on layer standards, this is the preferred Skalp workflow.

   The default style setting will first map everything in the section to the Skalp default pattern on Layer0.
   Then the 'by Layer' rule kicks in and overrides this for all layers that have Patterns setting attached to them.

   Each layer can have its own Pattern defined.

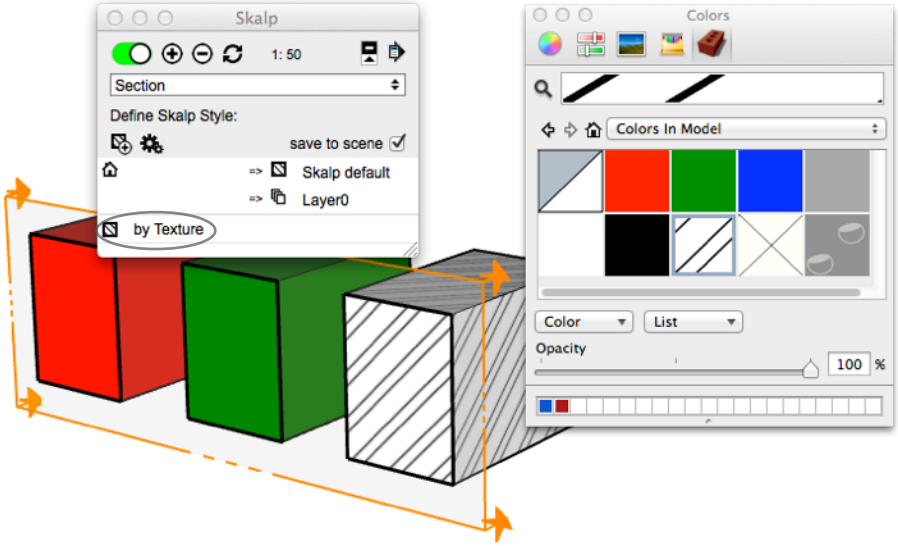


   In this example the block on the left is placed on Layer0. Since Layer0 has -no pattern selected-, the default style settings apply. The middle block resides on Layer1 which has 'Brickwork' attached. The block on the right is placed on Layer2 and therefore inherits the 'Insulation' setting.

4. Styling: Pattern 'by Texture'

A simple 'solid' material technique. The section cut will look the same as the material that is painted onto the group or component.

Each group or component can have its own texture or Pattern painted on it using the standard SketchUp paint bucket tool.

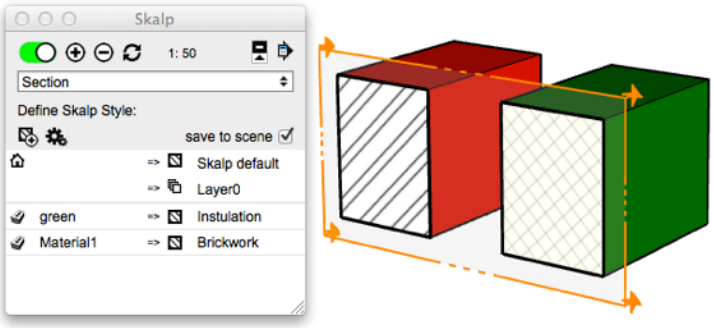


In this example the block on the left is painted red. The middle group is painted green and .the component on the right has a Skalp pattern panted on it.
Note that Skalp will only look at textures painted onto the group or component itself. Materials painted on faces inside will be ignored.

5. Style Overrides

You can add all sorts of overrides, and combine them into a customized style. You can even combine these with any of the above scenario's.

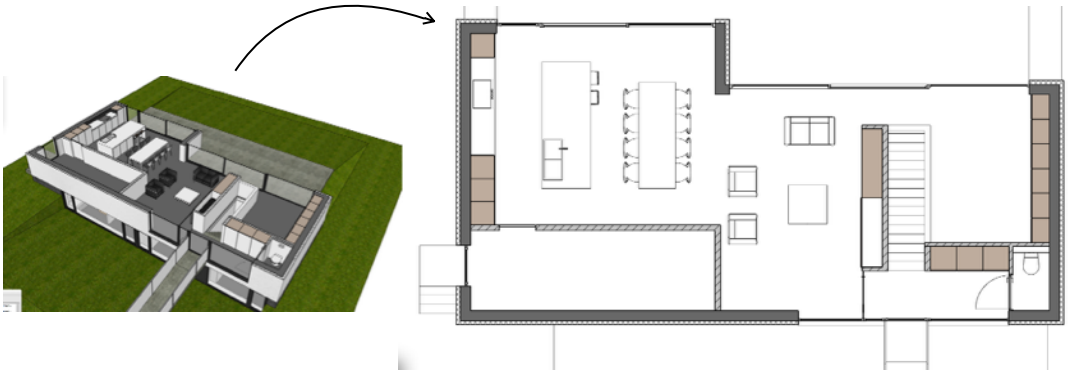
- layer: maps a specific layer to either a Pattern or another layer.
- tag: a powerfull way to pick up 'tagged' objects in your model and style them.
- pattern: remap a specific pattern to a layer or another pattern.
- material: pick up a specific SketchUp material, attached to a group or component, and remap this to another pattern or texture.



- scene: inherit a complete Skalp style from another Scene

6. Style 'Skalp Pattern Layer' + SketchUp 'Color by Layer' style (advanced use)

An advanced method to have your entire model represented in white, while still using Skalp Pattern Textures in the Section itself. This can be used to create really professional plans and elevations.



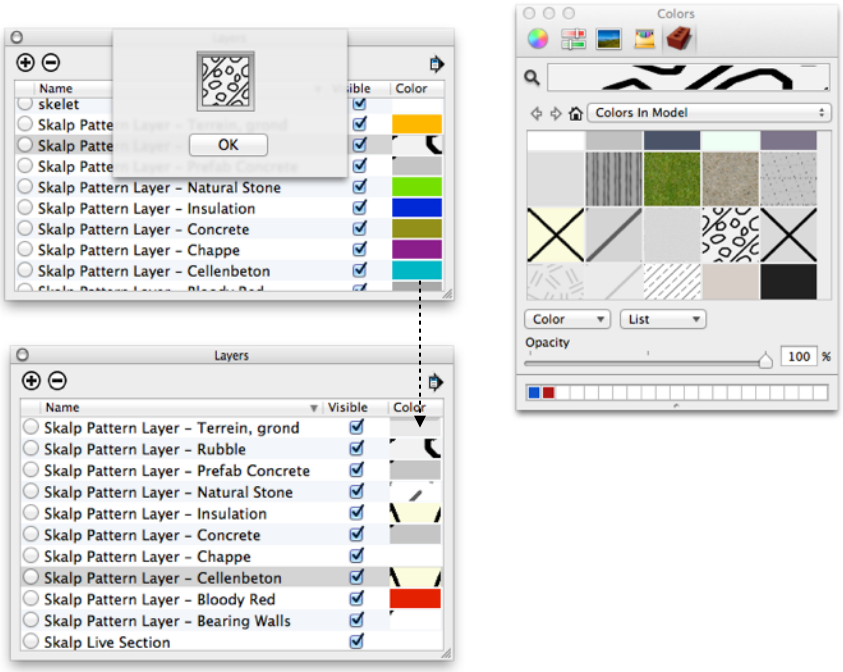
This method uses special **Skalp generated Pattern layers** in combination with SketchUp's '**Hidden Line**' and '**Color by Layer**' function.

Setting this up Step by step:

1. Create a Skalp Section, and properly associate it with a Scene. Use 'save Skalp settings to Scene' if necessary. Check your scene.
2. Organize your model and Skalp Style according to any of the previously explained methods using , Pattern 'by Object', 'by Layer', 'by Texture'. You may use Override Rules, or configure the Skalp Style any way you like but **make sure the end result maps all cutting results into Skalp Patterns.** We are now going to take these Patterned section results, and have them placed on separate dedicated layers.
3. Tweak your Skalp style so that it uses '**Skalp Pattern Layer**' as the default section destination layer. This is a special modus that actually

does more than placing the section results on one special layer. Using this setting Skalp will auto create (on the fly) several new and dedicated layers as needed, one for each Skalp Pattern used in the section result. These layers will be named:
'Skalp Pattern Layer - <skalp pattern name>'

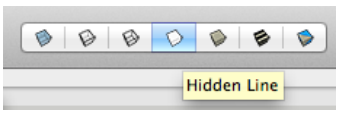
4. Optionally, instead of relying on the automatic Pattern layer creation, you might want to pre-create all these layers at once in advance to simplify setting up your office standard. To do so: Create the special Skalp Pattern Layers from the menu: '**Create Skalp Pattern Layers**'
5. Next: **manually assign a Skalp Pattern texture to each layer** in the the SketchUp layer dialog. One by one click on the 'Color' samples next to each layer. This will bring up the following:

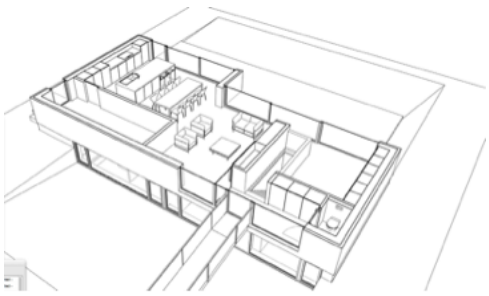


Assign a desired Skalp Patterns to each such 'Color' field by picking a Skalp Pattern from the SketchUp 'Colors' dialog. (You can only pick those Skalp Patterns that you created before using the Skalp Pattern Designer). Repeat the process for each Skalp Pattern Layer.

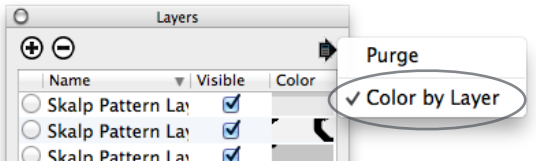
Unfortunately, SketchUp's ruby API provides us no method to automate this process at this time. As a result Skalp's Scaling features also cannot be automated in this particular workflow either. You would have to reassign the scaled Patterns to there respective layers to use different scaling styles in this mode.

6. Now set SketchUp to use '**Hidden Line**'. The entire model will now be shown in white.





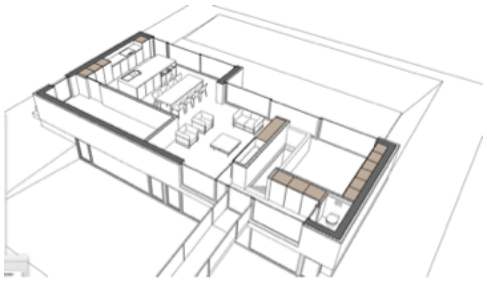
7. Activate Sketchup's '**Color By Layer**' function from the layer dialog.



This is the heart of the trick: **Hidden Line** will show the entire model in white with one special exception: **Textures assigned to layers** will still be shown when using **Color by Layer**.

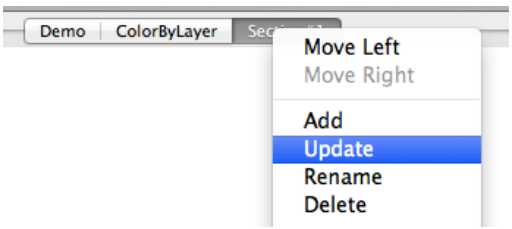
Notice that while pure Colors assigned to layers do get blanked out when setting 'Hidden Line', textures on the other hand 'escape' under the whitening radar. We consider this a rather unknown SketchUp 'feature'. You might even consider this a strange exception, but in this case it provides exactly the functionality needed.

8. Now you should see the Skalp Section including its Skalp Patterns in a white model context:



Nearly finished now, just some final steps:

9. Save or **update your Sketchup style**.
10. Choose your projection mode (e.g. align viewport perpendicular to the section and use Parallel Projection)
    Finally **update your scene** to use this style and view settings



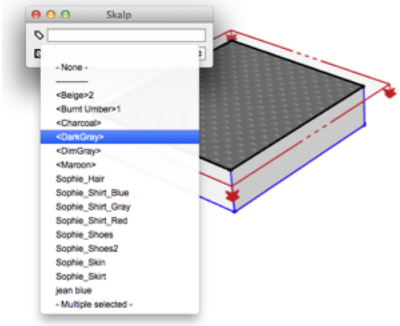
11. If you want to use this Plan / Scene in Layout make sure to always use '**Update all Scenes (for Layout)**' from the menu before updating your referenced model in Layout.

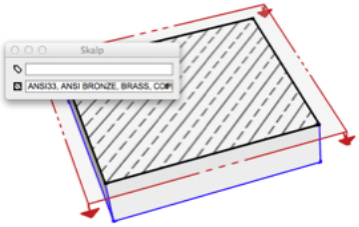
The method described above is not easy. You need to know certain details and quirks about SketchUp styles, layers etc. Depending on your SketchUp experience you may need extra practice to get this up and running. We use this method in our architectural practice every day to create our plans, which is exactly the reason why we implemented this into Skalp. We are always looking for improvements so your feedback is welcome.

4. Assigning Section Materials to objects (Pattern 'by Object')

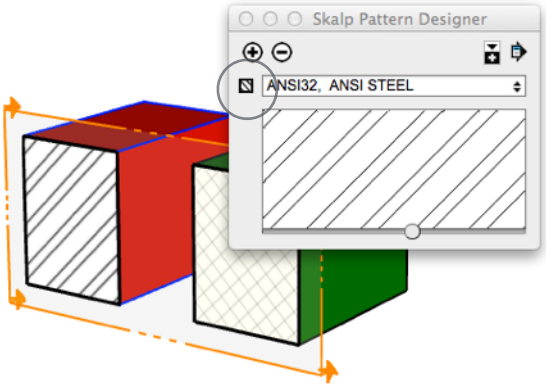
When one or more **groups or components are selected**, the main **Skalp dialog changes** to allow you to assign either a 'tag' or a 'material'. Let's skip tag for now.

Open up the lower drop down list ('material') to bring up a list of all the materials currently available in this model for assignment. Notice how the list is divided in an upper and a lower part, divided by a dashed line. The lower part shows all your normal SketchUp materials. The upper part is reserved for Skalp Patterns, made with the Skalp Pattern Designer. Pick a pattern name from the list.





As an alternative, Patterns can also be attached to groups / components in the current SketchUp selection set directly from inside the Pattern Designer dialog. Select some objects and the click on the small 'Pattern icon to the left of the pattern selector to assign the material.



5. Exchanging Skalp models with others

6. Update all scenes for Layout / Pass your model to Non Skalp SketchUp users

- When you embed your SketchUp model in a Layout file (Layout is available only with SketchUp Pro), this feature is needed to keep all all scenes containing Skalp sections up to date.
- It is extremely easy to use: just click 'Update all Scenes (for Layout)'. This will bring all scenes in a consistent state and save your model.
  If you then update your model reference in Layout all Skalp Sections should be up to date.
- If you want to pass your model to other SketchUp users that don't have Skalp, you can use 'Update all Scenes' to create a static version of the model that has all sections in all scenes set up with the correct layer visibility states.

  Some technical explanation on what happens behind the scenes here:
  Scenes in SketchUp do not actually store a complete static state of the model, but rather store a sort of a recipe on how to change the active viewport. When the active viewport changes, lots of things change such as layer and entity visibility states, camera position etc... For Skalp in order to update, lots of calculations need to be done. However these things cannot be run inside Layout. So 'Update all Scenes (for Layout)' works around this issue by putting a special (normally hidden) Section group in each Scene especially for Layout.

7. Export to DXF

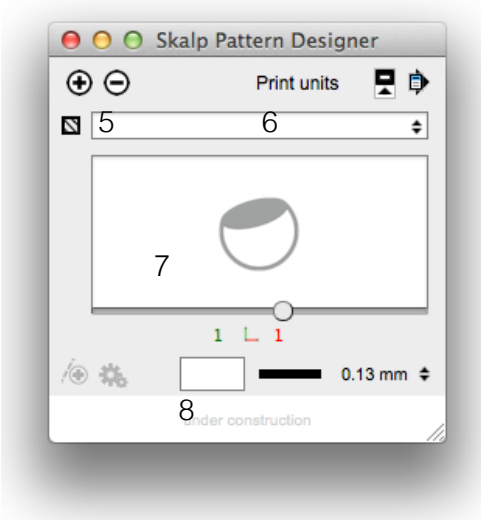
Sorry, this section is currently under construction.

3. Start Using Pattern Designer

1. Overview

Click on the Brick Wall like Toolbar Icon in the Skalp Toolbar to bring up the main Skalp Pattern Designer dialog:

1 2 3 4



1. Adds the currently selected Pattern to the SketchUp material dialog. This also prepares the Pattern to be assigned as a Skalp Section material.

2. Deletes the material form SketchUp material dialog.

Pattern Scale

3. Brings up more options to customize the patterns attributes.

4. Menu: manage import and export of Pattern files.

5. Assignment Icon: assigns the selected pattern to the groups / components in the current SketchUp selection set.

6. Pattern selector, also allows you to rename the pattern to a custom name.

7. Pattern preview windows with slider to zoom the pattern. Attention: the zooming has no influence on the actual pattern scale, use 8 and 9 to set its size.
8. Calibrate the pattern size by changing of the length of the red X and/ or green Y gauges. Click on these numbers to edit its values. Use small values to start with (e.g. 0.3) to start with, as too large numbers will force skalp to create very large png textures which may be very slow.

9. and 10. sorry, feature under construction.

11. Pattern Background color. Click to open color picker.

12. Pattern Line color. Click to open color picker.

13. Determine Pattern Line Width. This will change the pattern line width in the generated pattern texture. (line widths are not yet shown in the preview window.)

You can also check our Youtube chanel:
Basic tutorial on how to create and assign a Skalp section cut material.
http://youtu.be/BYuzuTranIM

1. Creating and using Skalp Pattern Textures

Before you can use a Skalp Pattern, you have to prepare it for use.
1. Load a pattern by selecting it's name from the drop down list.

2. An autocad pattern definition is read and a preview is shown.
Autocad pattern files are unit-less. That means they do not have a scale. So in order to use them, you have to 'calibrate' them. This is the reason why a red and green gauge is drawn on the preview.

3. Define the actual size of the pattern. Do this by clicking the 'Show more' option and change the numbers shown directly below the preview. This will change the scale at which the pattern will be created.

Sorry, this section is still currently under construction.

2. Preparing Patterns for use in your Skalp Sections

Sorry, this section is currently under construction.

3. Using Patterns for use as textures in your model

Sorry, this section is currently under construction.

4. Frequently asked Questions

Q. After putting in a Section, I cannot hide the Section Cut. When in an Elevation, Skalp does not allow me to turn off layers when I do not need it to be shown. How do I HIDE a section cut or how can I have a Scene WITHOUT a section Cut?

A. See 'Using Scenes to manage Skalp Section visibility'

Q. Can I install Skalp on my second computer?

A. Yes! You can install Skalp on 2 computers! (with limitations)

As stated in the End User License Agreement: "*You may use the SOFTWARE on one computer at any time. You may copy and register the SOFTWARE on up to two computers. (e.g. your primary workstation + a laptop or a secondary computer)"*

So please go ahead and activate Skalp on both of your computers. You may copy over the Skalp.rbz, but you cannot copy the Skalp.lic from one computer over to another. That needs to be created from our server whilst having an internet connection during the activation. You can use your activation code on 2 machines. also in case you would reïnstall or loose the Skalp.lic file, simply reïnstall Skalp en and reactivate it with your License Activation Code.

Q. When I select one or more groups or components, I open up the lower drop down list ('material'): in the lower part I can see all my normal SketchUp materials, but in the upper part I don't see Skalp Patterns.

A. You have to create and add the patterns you would like to use from the pattern designer dialog. (But maybe you did, hang on...) The material should show up in the upper part of the Skalp dialog. However there is a known issue that this list does not get updated when elements in the model are selected during the creation of the pattern. Try to deselect everything and then re-open the drop down list.

5. Trouble Shooting

Problem: I never got my license key, auto activate did not work for me.

Answer: Please contact support@skalp4sketchup and provide as much as you can from the following checklist:

1: Your name, or any information we can use to look up your record in our database.

2: Did receive your license activation code and the skalp.rbz download link in the mail?

3: Are you on Windows or on OSX? Which version? If under virtualization (e.g. Parallels, Vmware,...) mention that also.

3: What kind of behavior are you seeing exactly? Do you get to see the Skalp toolbar icons? If so, could you open sketchUp's ruby console and then click on a skalp icon. Do you get an error message on the console? If so, send us that.

4: If you see Skalps icon, then you most likely also see a Skalp menu item in SketchUp under 'plugins'. Copy me the info you get for 'Info from support' there.

5: In case you are on windows: from the windows 'start' search field type 'cmd' <enter> Type 'ipconfig /all' <enter> and send us a copy of that also.

Problem: My version has expired, now what?

Answer: You need to install a new beta version. Latest Skalp versions can always be found at:

download.skalp4sketchup.com/downloads/latest

Restart SketchUp before re-installing Skalp.

We understand these beta expiry dates can cause some discomfort, but we need to ensure you are running a recent version with the latest fixes and changes. We will revise the expiry dates as Skalp's development proceeds and remove any expiry once the beta ends. Normally, at startup, Skalp will inform you if a new version is available. This mechanism currently can not run once your version reaches its expiry date. We advise you to install each update once it becomes available.

Skalp 1.0 BETA 07/16/2014

Version: 1.0.0090 (BETA 6), EXPIRES 08/30/2014, UPDATES WILL BE PROVIDED

Disclaimer / Additions to the End User License Agreement:

1. Before using this product you have to acknowledge the following: This product consists of an **early public BETA release**. Some posted product features are still missing, unstable or are not fully implemented yet. See 'Known Issues' below. Make sure you also read and accept the Skalp End User Agreement (EULA) before using this product.
2. If you bought Skalp, then your **license is PERMANENT**. A right to use all 1.x.x versions of Skalp is granted to you. It is CRUCIAL that you keep your activation code in a safe place, as this might be needed to reactivate future updates of the product. Your license activation code comes in the form xxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx You can find it in the mail you received upon purchasing Skalp from our web store.
3. IMPORTANT NOTE: On all Skalp BETA releases following temporary limitations apply: The product itself is hard coded to EXPIRE. Please note that this does NOT invalidate your license. You will be notified before the expiry date to update the product to a newer version. Upon final release the product will no longer expire.
4. If you are unable to agree to any of the above conditions, for whatever reason, please contact us at sales@skalp4sketchup.com. If we are unable to provide you with an adequate solution, you must refrain from using the software. In such case we can offer you a refund. If you have further questions and/ or suggestions please send these to support@skalp4sketchup.com

Release Notes

Fixes in Version 1.0.0090:

SKALP

- NEW 'Pattern by Texture' Skalp Style option to use the material attached to a group / component as it's section pattern.
- NEW 'Define Pattern by Layer' dialog.
- NEW 'Pattern by Layer' Skalp Style option to map section patterns as defined in the new 'Define Pattern by Layer' dialog.
- renamed Skalp Style option 'use assigned hatch pattern' to 'by Object'
- Changing the scale of a scene will now correctly scale its section patterns. This is applied to the active scene only.
- better section results for cases where the sectionplane passes through model vertices.
- fix running Skalp on VMWare or Parallels (manual license reactivation needed)
- speed improvement: more objects ignored when possible (check distance fix in section algorithm)
- fix 'export to layout', sometimes not all scenes were updated.
- renamed and reorganized the menu items (main skalp dialog)
- renamed 'Export to Layout' to 'Update all scenes (for Layout)'
- NEW default layer setting: 'Skalp Pattern Layer'. It places the section results on layers named 'Skalp Pattern Layer - <pattern name>'. these Layers are auto-created on the fly when needed.
  Intended for advanced use in combination with SketchUp 'Color by Layer' setting. You need to manually attach a pattern / texture to each of these created layers. Click on the color box to the right of the layer name in the SketchUp layer dialog. This process can't be automated because the SketchUp API does not have a function to attach textures to the layers.
- NEW: 'Create Skalp Pattern Layers' added to the menu. May be used in conjunction with the new default layer setting: 'Skalp Pattern Layer'.
- fixed a crash when creating a skalp section without creating a scene.

PATTERN DESIGNER

- default units are set depending the model units.
- NEW: You can use different units for setting the size of the pattern in the dialog
- Added more pen sizes
- fix that prevents creating too large pattern textures, which could cause a crash.

Fixes in Version 1.0.0066:

SKALP

- better section results for cases cutting over a face's vertices.
- better section results: fix in loop equal edge detection

Fixes in Version 1.0.0065:

SKALP

- fixed an issue that caused the 'Toggle Section Display' setting to turn on when it shouldn't.
- fixed a problem on license validation in some specific cases.
- correction on removing the live sectiongroup when editing in context
- corrected direction of loops in sectiongroup (partial fix for 'validity check' error)
- deleting faces in context or model now triggers update section
- Scaled materials are no longer shown in the skalp styles listbox
- Fix adding multiple copies of the default skalp material to the skecthup material dialog
- loading multi-line Skalp styles is now faster.
- Skalp styles no longer update 2x upon scene change.
- Skalp section groups are now locked (tampering with the section groups could cause problems)
- A new Scene that has an active Skalp section now has its Skalp Style setting 'save to scene' checked by default.

PATTERN DESIGNER

- NEW: If you remove the default skalp.pat file, Skalp will repair this file to its default state on next startup. ATTENTION: It is recommended to add separate files in the directory to add your custom *.pat files containing one or more pattern definitions. Skalp will read all *.pat files under Resources/hatchpats. Subdirectories will also be searched for *.pat files.
- NEW: The small material icon on the Pattern Designer dialog can now be used to assign skalp pattern materials directly to selected SketchUp elements.

Fixes in Version 1.0.0046:

SKALP

- CHANGED BEHAVIOR: Live section update is now a preference which can be turned on or off in the menu of the Skalp dialog. When live update is turned of the section names are displayed in red.
- CHANGED BEHAVIOR: The green / red slider button now indicates if there is a section plane active. Sliding the slider to red effectively deactivates the active section plane and sets the section name field to 'no active sectionplane'. Sliding the button to green re-activates the last used active sectionplane.
- NEW: Section offset distance can be set with a preference (menu Skalp dialog). Default is set to 1mm (was 3mm in previous version). On a macbook retina it can be set as low as 0.1mm.

- NEW: Changing the scale of a section will change the scale of the Skalp material. The look of the texture will be the same in each scale when printed at the intended scale. If you want a different look create a different material and use the Skalp styles to assign it to the desired Scene.
- NEW: Scene selector type in Skalp Styles to use the Skalp Style of another Scene.
- Auto save of the SketchUp model after export to layout function
- Stability fixes

PATTERN DESIGNER

- Removed scale indication from Pattern Designer dialog.
- Editing a material will edit all different scales of the same material
- Added patterns

Fixes in Version 1.0.0038:

SKALP

- fixed overlapping text with the selection arrows of the hatch selecting dialog.
- some input fields of the dialog were not editable
- Multiple sections dialog coming up issue should be fixed. (finally!) This was still broken when converting an existing SketchUp Section to a Skalp Section with 'Create Skalp from SectionPlane from the context menu.'
- multiple opening modal dialogbox (create scene) on Windows (SketchUp bug modal dialog inside a non-repeating timer)
- if you click on the pattern icon in front of the define sectionmaterial selection field, the selected material (if it's Skalp material) is opened in the pattern designer ready to edit
- DXF export, error in line endings on windows prevented file from loading.

PATTERN DESIGNER

- Materials will be added or modified automatically when leaving the dialogbox.
- The delete button had a problem.
- It wasn't possible to edit the rgb field of the colorpicker. This is fixed now
- Some input fields of the dialog were not editable
- The add (+) button now clears the dialog so you can start building a new material.
- Colorpicker is set to the correct color when editing existing materials.
- lineweights in mm now give the correct thickness
- lineweights stored in inch are correctly converted back to mm or pt penwidhts
- gauge only visible in edit mode
- auto update on window blur happens only when something is changed
- show update symbol when something is changed
- fix rounding y-value of the gauge

Fixes in Version 1.0.0023:

- An issue in Windows that causes the section dialog to appear many times, which as a result would crash Skalp. *This fix needs testing, more work might be needed. Please inform us if you still see this bug.*
- Removed an ignored hatch pattern that had syntax errors
- DXF export save path corrected (still temporarily hard-coded to be the same path that holds the model you exported from.)
- A fix in Skalp auto update mechanism.
  *When updating to a new version: **in some cases** you will now be asked to restart your computer. Make sure you do this **if asked**. Before the reboot Sketchup will inform you that the extension was successfully installed, but this is incorrect. After the reboot Skalp will finish its update process correctly. (This reboot needed scenario happens only when SketchUp keeps SkalpC.so locked.)*

New:

- Added more info to the 'Info for support' window'. *In case you encounter problems, providing us with this info will help us to understand the problem and fix it.*

General Issues

- SketchUp 2014 itself has a problem loading the Ruby standard Library when you have opened SketchUp by clicking a SketchUp file instead of opening the Sketchup Application icon. This will be fixed in SketchUp 2014's next maintenance release. Make sure to always open SketchUp from it's Icon.
  This problem can be identified if for instance you get an error 'Error Loading File SecureRandom' on the Ruby Console. This problem is unavoidable on windows XP, therefor skalp cannot run under windows xp.
- There may be **conflicts with other plugins**. Especially those that make use of SketchUp Observers. As a workaround temporarily move your plugins out of your plugin folder and run Skalp.
  If you would like to really help us fixing this, try to determine what plugins are conflicting by re-adding your plugins one by one, test Skalp on each iteration. This might be cumbersome, we are not forcing you, but if you catch a problematic conflicting plugin, we could help workaround it for all.
- If you have Dibac/Solid Section running, this will prevent Skalp from working as intended.
- Older versions of 3DRubyWindow (rs_window) have a conflict with Skalp. *Please upgrade 3DRubyWindow from the Extension Warehouse to version 3.0*
- If you entered **no company** upon purchase may you need to contact us as this will prevent Skalp from running. We will enter a company in our database. Next you should delete your Skalp.lic file and then reactivate Skalp using your License Activation Code.
- Skalp Dialog: buttons do not work properly on OSX 8.5 with Safari 6.1.4 > Upgrade to Mavericks + Safari 7.0.3 (we are investigating if we can work around)

Skalp:

- Instability: This is top priority in this first BETA. Here is some advise in case you encounter problems:
  - In case Skalp stops responding, or doesn't update anymore.
    First save or backup your model.
    In many cases you can fix this by unloading and reloading Skalp by clicking twice on the Skalp Tool Icon.
    In case the problem persists, it might be necessary to restart SketchUp.
  - In case the error is reproducible, you might have found a bug. Please open SketchUp's Ruby Console (Windows > Ruby Console) and try to reproduce the problem. If you see an error message on the console, please copy this. You can help us fixing it as soon as possible by sending a clear reproducible discription of the problem along with the associated error message from the Ruby Console to bugs@skalp4sketchup.com We will fix as many problems as we can as soon as possible.
  - You might get an unwarranted message from one of Skalps security checkings in this version. This mechanism is intended to make sure you have a recent version of Skalp and your license is ok. If this persists, please contact us.
- Basic user manual, tutorials needed. This is high priority, work is currently in progress. We had a choice: Either postpone the release further or release as planned and build / update from there. We opted the latter, guessing you'd rather have your hands on Skalp now.
- On Windows: adding the first Skalp section to the model is slow, subsequent sections should perform as expected.
- Units: Skalp is designed to follow the models units as set in the model info > units dialog. However, there are some issues with this is this build.
- DXF export currently only exports current scene and only saves to the current SU model directory.
- DXF export is limited to basic functionality, layer mapping needed.
- DXF export does not work when your model is opened from inside layout. (the sketchup files path isn't valid, and the current implementation of DXF export is hard coded to adhere to that path. We need to change and improve this behavior.
- DXF export scaling issue on exported hatch patterns, causes recent autocad versions to not show the patterns.
- Translations: Only English is supported in this version.
- Clicking 'show more', to show the Skalp Styles can be very slow when multiple lines are defined in the Skalp Style.
- Skalp Styles: on windows update scene fires later than intended.
- Skalp Styles: sometimes a style override is ignored when changing scenes
- On windows: Skalp Auto Update has issues. Manually clean Skalp from your plugin directory
- A conflict with Rich Section plugin causes Skalp to crash.
  Workaround: uninstall rich section, we will try to create a solution, but this might take time.

- Validity Check error on saving the model. This is caused by 'double' faces inside the Skalp generated section group. This happens when sometimes faces that are removed from a context (e.g. moved from the model into a group or component) are not properly tracked. If you force update the Skalp sections before saving, this should prevent the error. The error will not harm your model. It is on our list to fix.

Pattern Designer:

- Pattern Designer in this version is due to get serious user interface changes in the near future. We are aware of its user interface glitches.
- Missing Features (expected to be included in one of the next beta updates)
- User interface to IMPORT new pattern files. This will change very soon, but for now, new *.pat pattern files can be manually placed in:

  `C:\Users\YOUR USERNAME\AppData\Roaming\SketchUp\SketchUp 2014\SketchUp\Plugins\Skalp\Resources\hatchpats\` (Microsoft Windows)

  `/Users/YOURNAME/Library/Application Support/SketchUp 2014/SketchUp/Plugins/Skalp/Resources/hatchpats/` (Mac OS X)

  On Mac OS X, to access this hidden folder: Open a new Finder window, press and hold the Option (left alt) key on your keyboard, the click Go in the menu bar > Library > Application Support > SketchUp 2014 > SketchUp > Plugins
- Editor in the user interface to edit the pattern definitions files themselves. This will be implemented in the white space at the bottom of the Pattern Designer dialog.
- Trying to make a pattern too large may be very slow or even crash.
- Editing an existing Skalp material doesn't loads its colors and line widths correctly.
- Creating a new Pattern should reset the color values.
- Zooming before a pattern is first load, loads last preview from cache.
- Line widths: 'mm' widths can be broken on some installation, pt widths should work.
- Line width are not yet shown in the pattern preview window.