

Designers' Geometry Box



GUIDE

Version 1.0.1

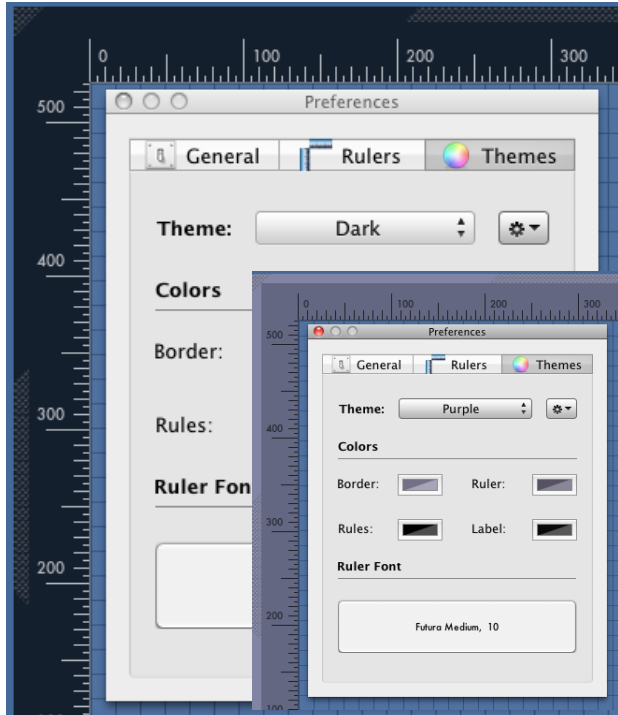
Wednesday, November 25, 2009

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THE TOOLS

Frame



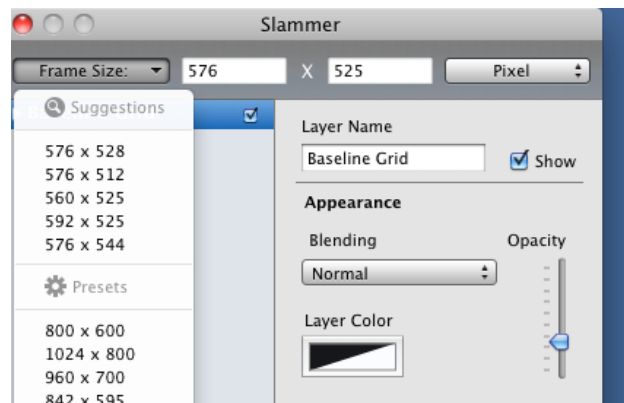
You can $\text{⌘} + \text{drag}$ on the rulers to change the origin, double click to set the origin to the edges / center or set them to arbitrary values in the ruler preference pane.

Slammer's rulers are pixel perfect and support pixels, inches, centimeters, millimeters & picas. The frame size can also be saved as a preset for accessing it for similar type of works. Slammer also makes educated guesses on alternative frame sizes based on the layout distributions (discussed later on).

You can also visually center the Slammer frame on any of your displays using the *Frame->Center* menu. This menu will list the displays available on the system. The **Keep On Top** option ($\text{⌘} + \text{⌘} + \text{T}$) lets the Slammer window be on top of any application even when inactive. **Click-through** mode ($\text{⌘} + \text{⌘} + \text{K}$) takes it even a step further by allowing you to manipulate the objects underneath the Slammer frame. Note that these two options are transient and are not remembered between application launches.

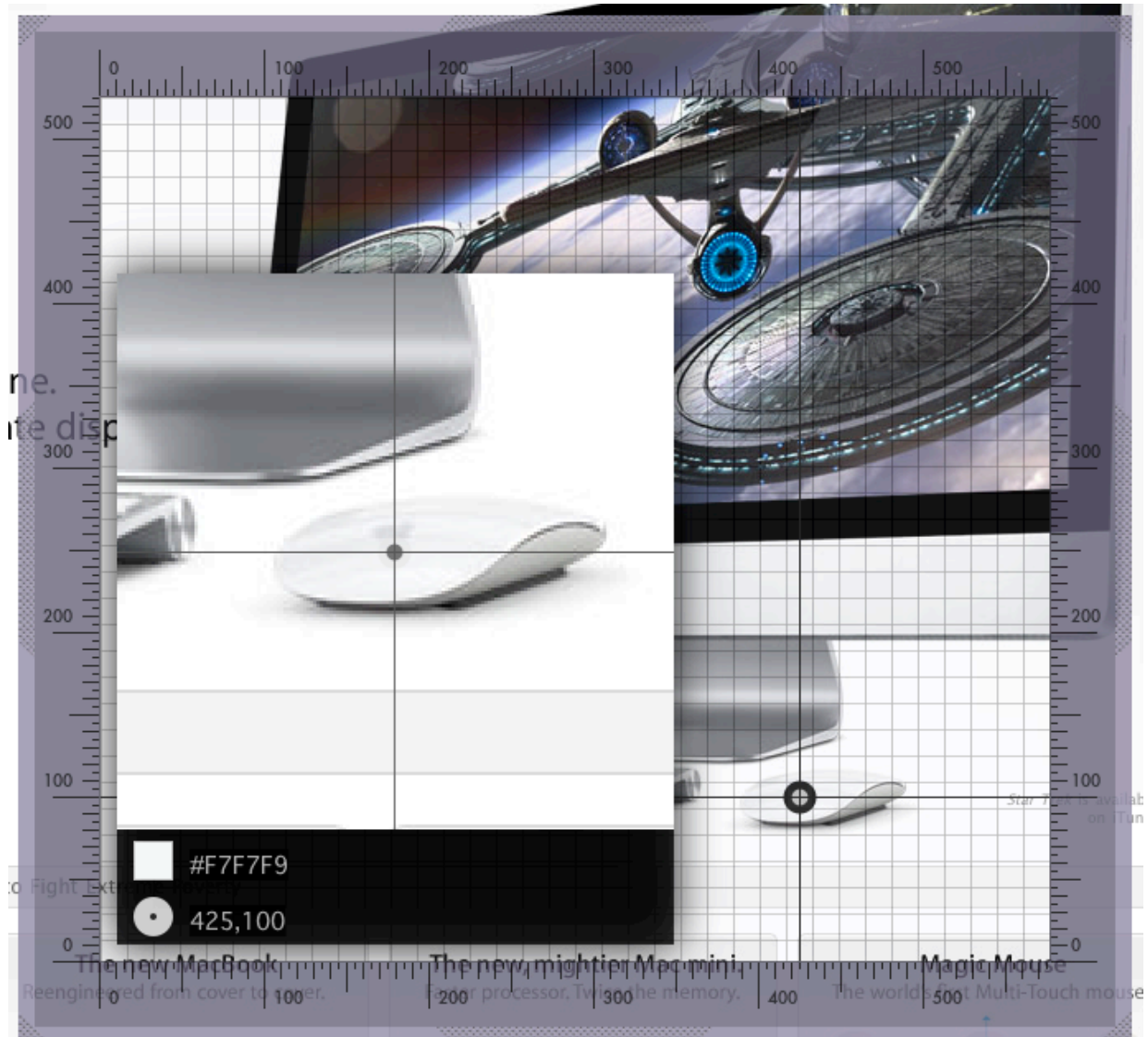
Slammer's frame consists of rulers and a border. The border allows the frame to be resized along the edges and corners. The Slammer frame comes with the default metallic **Unibody** theme and 5 customizable themes.

You can choose among the 6 themes that come with Slammer or customize, duplicate or create new ones. The rulers, border or both may be hidden or shown quickly from the *Frame* menu or the associated keyboard shortcuts.

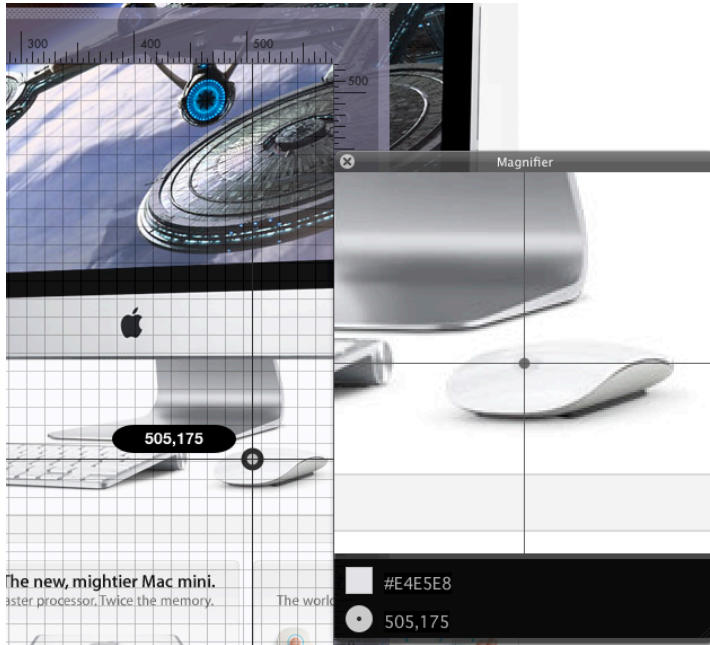


Crosshairs, Magnifier & Color Picker

Slammer crosshairs are thin, crisp, accurate and are visible on any background. They display the coordinates based on the Slammer rulers. The crosshairs can be moved using the mouse or using the *AWSD* keys. You can make the crosshair respond only to the keystrokes by toggling the **Lock Crosshair to Mouse** (⇧⌘L) option. When set to **Snap to Ruler Divisions** the crosshairs move in tune with the smallest subdivision on the rulers. Crosshairs can be shown or hidden using the *Crosshair->Show* command (⇧⌘C). Showing or hiding the crosshair also hides the magnifier and the information panel.



The Slammer magnifier can be displayed inside the frame or as a heads up display (HUD) panel. When displayed inside the frame the magnifier dodges the mouse by positioning itself along the edges. The Slammer magnifier combines the area of magnification and the magnification factor (how much a given area is magnified).

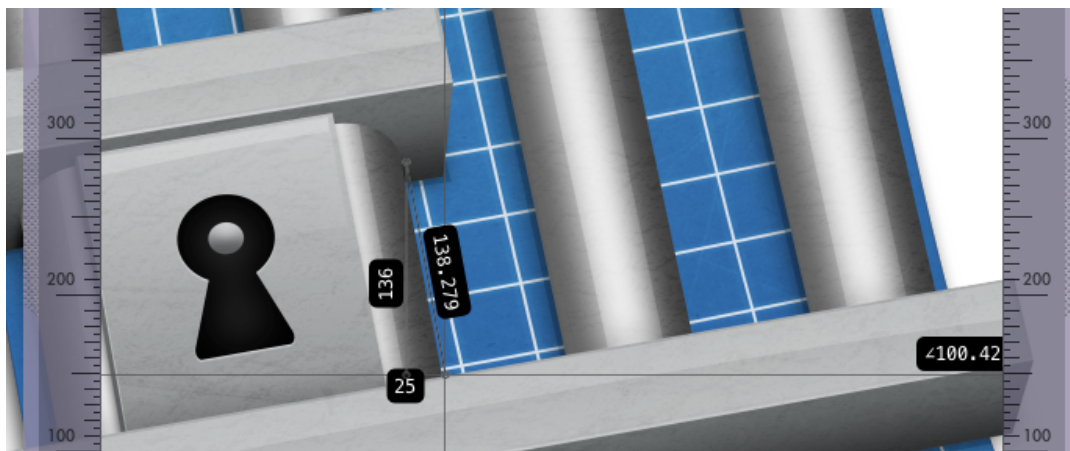


To increase or decrease the magnification is as simple as scrolling up or down when the magnifier is displayed. Resizing the magnifier HUD window increases or decreases the magnification as well. The magnification area is calculated based on the current crosshair position.

The info panel displays the coordinates and color under the pixel. The displayed color can be copied to the clipboard simply by pressing ⌘C.

Measurement Mode

The measurement mode in Slammer allows pixel perfect measuring of distance and angle. After setting Slammer in **Measurement Mode** (Frame->Measurement Mode or ⇧⌘D) simply click and drag to measure. Pressing the SHIFT key when dragging keeps the line straight.



THE GRIDS

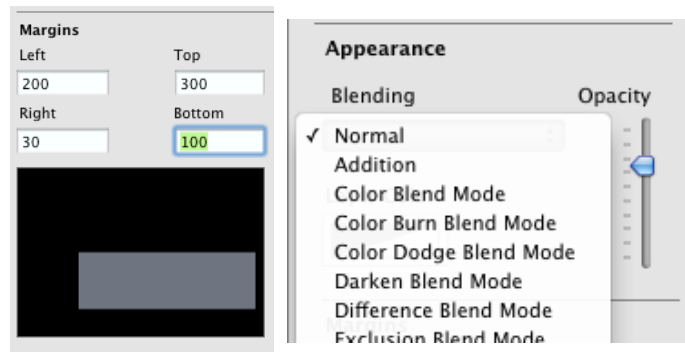
Slammer is defined by its grid overlays. Slammer allows you to create several grids that are overlaid on top of each other to create layout schemes as complex or as simple as you need them to be. Combined with the click-through mode, Slammer grids provide a fantastic new workflow for grid based design.

Slammer grids are defined using distributions. Slammer currently supports four distributions: **Uniform**, **Fibonacci**, **Golden** and **Harmonious**. New Layers & Overlays can be added and removed using the buttons under the source view on the left hand side of the inspector window.

The source view also allows reordering and duplicating of layers & Overlays through drag and drop. Layers & Overlays support blending modes to control the visibility of a layer or an overlay in relation with others.

Layers

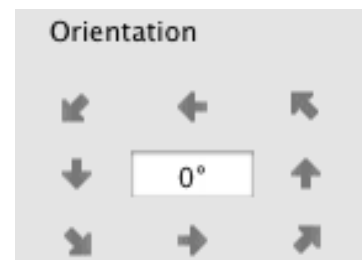
Slammer layers are sections of the canvas defined by the Slammer frame. Layers are restricted to a specific portion of the canvas using margins on all four sides. Slammer Layers also support opacity, blending mode and background color, which in combination define how the layer and its contents get displayed in conjunction with other layers.



Layers provide the bounding box for the overlays that they contain. In grid lingo, Layers are the modules in a modular grid. They size and position are usually a factor of the baseline grid.

Overlays

Overlays are the grid containers. They divide the bounding box provided by their parent layer based on the chosen distribution (grid sections). Like layers they also support opacity and blending modes. Overlays can be oriented at any angle. For example, to layout a design that goes diagonally, the overlay can be oriented at 45°.

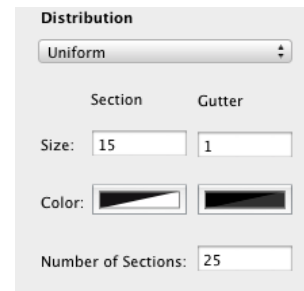


Grids in overlays are presented using different distributions. Slammer currently supports four distributions Uniform, Fibonacci Series, Golden Section and Harmonious Section.

Uniform Distribution

Uniform distribution is the common typographical grid. It is defined by sections (columns or rows) and gutters. Uniform distribution accepts the section size and gutter size and repeats them across the available area. Section and Gutter colors can be chosen as well.

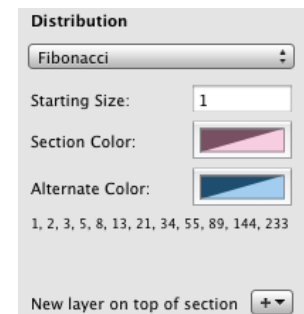
To create a 16px baseline you would specify 15px as the section size and 1px as the gutter size.



Fibonacci Series

1, 1, 2, 3, 5, 8, 13...

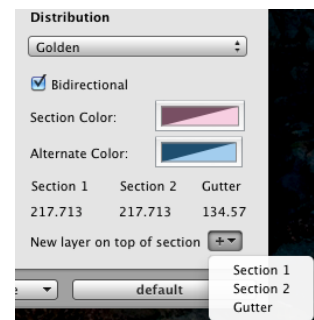
You can provide a starting value for the series and the colors for the alternating sections. The **New layer on top of section** button allows you to create a new layer that is bound to the rectangle occupied by that section. This is the best way to build a layout in an exploratory fashion.



Golden Section

Golden sections divide the content into two segments in the ratio 1.618. The bidirectional option allows you to create 3 columns that are in the ratio: 0.618 : 0.382 : 0.618. This is created by having opposing golden sections.

Golden Sections also allow creating layers on top of the sections in the distribution. Here is an example:



Page Layer

Golden Section Columns

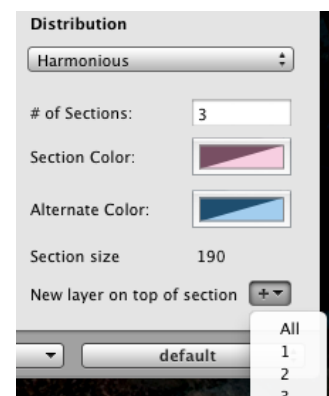
Create Sidebar Layer on top of section one(smaller)

Create Content Layer on top of section one(larger)

Harmonious Section

Harmonious sections are the simplest of them all. They divide a given area into equal number of sections. Harmonious sections allow creation of new layers on top of each section as well.

Each of the sections discussed above also provide the derived values such as the number of sections and section sizes. These values can be copied and paste into the actual work, say for example cascading style sheets.



AN EXAMPLE

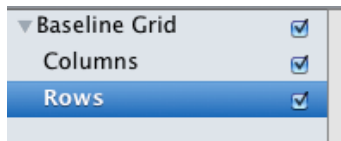
Goals

The objective is to create a membership form with the following fields using Adobe Illustrator:

- Name
- Address (3 lines)
- Phone
- Members (lists of names)
 - Male
 - Female
- Comments
- Signature

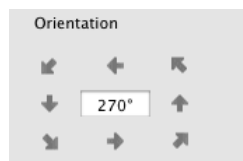
If you'd rather watch a video, see it at [On Layout](#).

Step 1: New Template

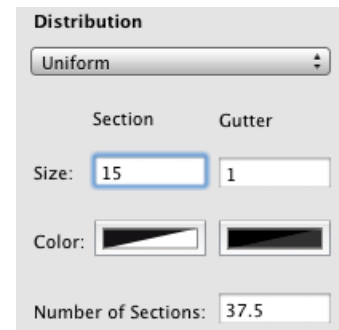


You can create a new Slammer template by pressing $\text{^} \text{⌘} \text{N}$ or choosing from one of the existing templates. Enter "Membership Form" as the name of the template. Creating a new template automatically adds a Layer named Baseline Grid with two uniform overlays named: Rows and Columns.

The frame size is set at 800 x 600 default. The baseline grids are positioned at 16px each (15px section and 1px gutter). You can see this by selecting either the Rows or the Columns item in the source list.



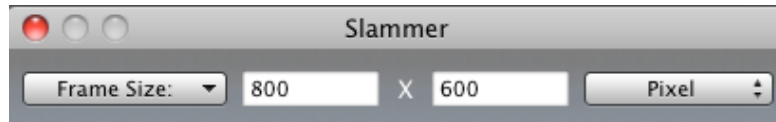
You can also see that the orientation of Rows is 270 degrees (going top to bottom) and the orientation of columns is 0 degrees (going left to right).



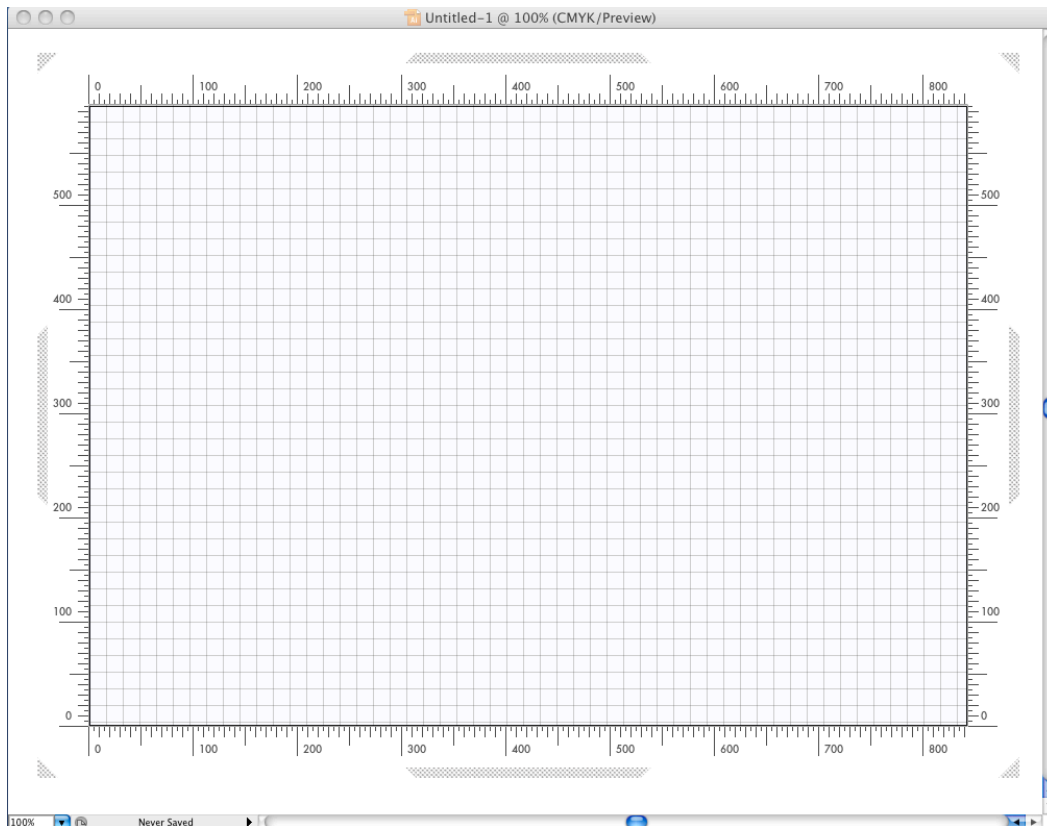
Reduce the opacity of the Rows and Columns overlays to less than half the slider height.

Step 2: New Illustrator Document

Create a new Adobe Illustrator document and choose A4 as the paper size and set the orientation to landscape. Make note of the document width and height (840 x 593 px). You can copy and paste the width and the height into the Slammer frame size pane at the top of the inspector.



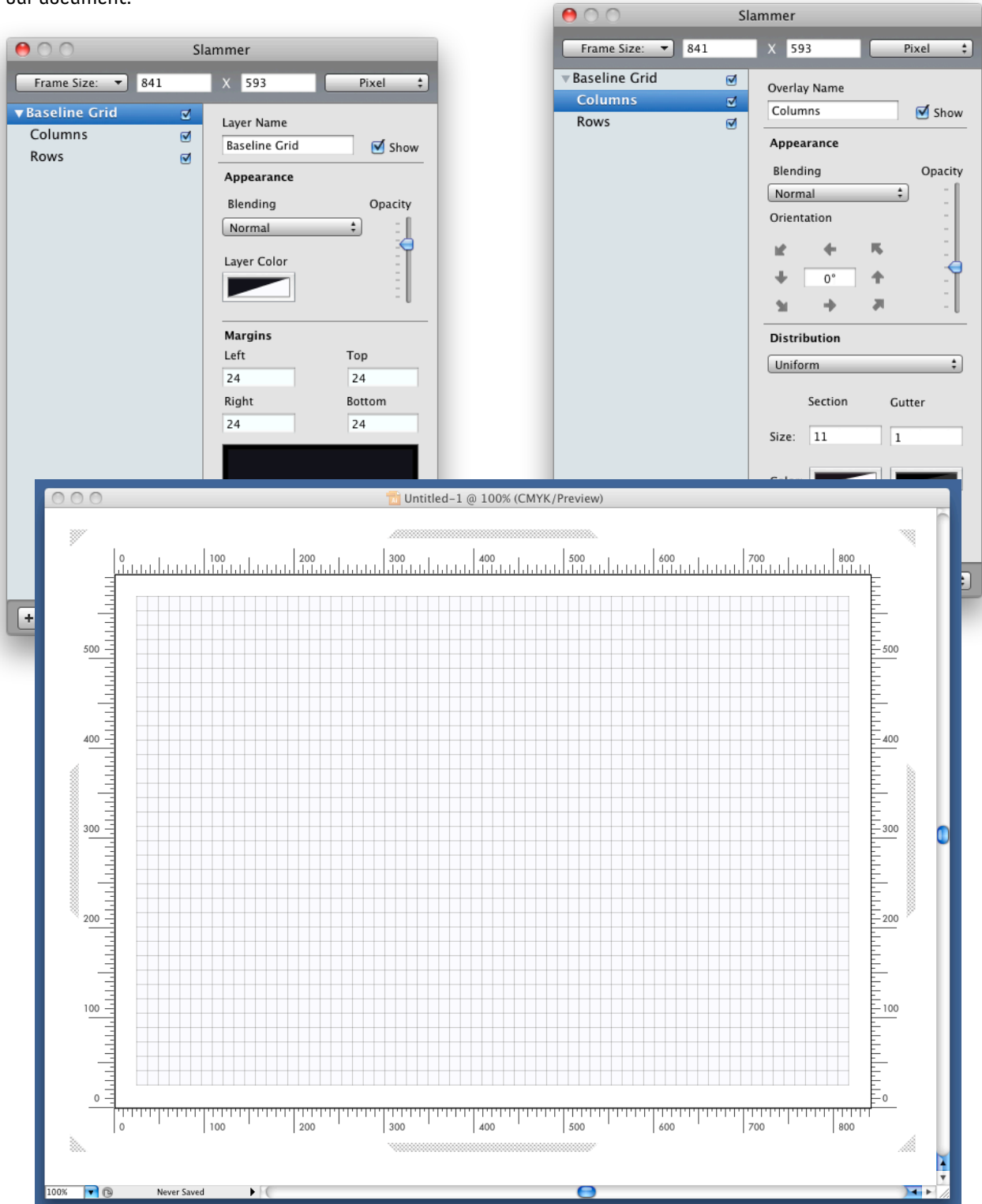
Enter "MembershipForm" for the name and press OK to create the new document. Make sure that the document zoom level is at 100%. Now position Slammer on top of the document by clicking and dragging anywhere on the Slammer frame.



Slammer is set to use the "Glass" theme for the above screenshot.

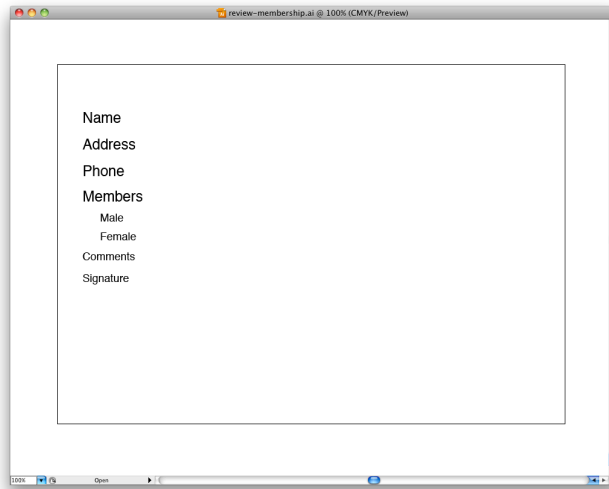
Step 3: Setup Margins & Columns

The width of the document is 840 px. $840 / 12 = 70$. Lets make our margins 24px each. Select "Baseline Grid" from the source list and set the margins to 24px each. Also set the Section Size to 11 px to get 12px columns for our document.



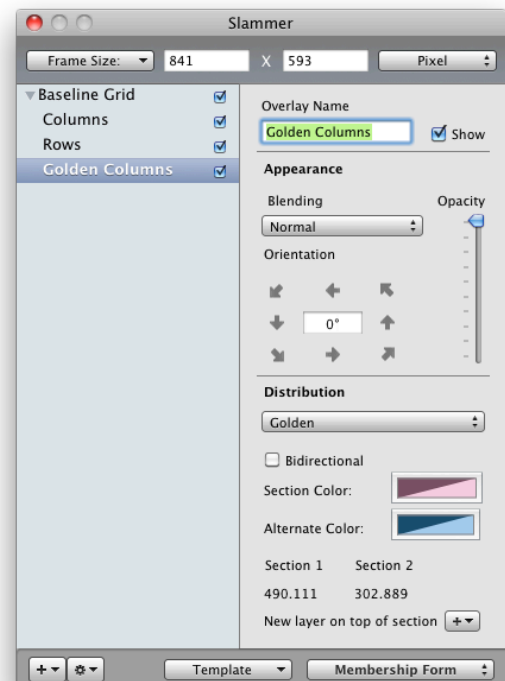
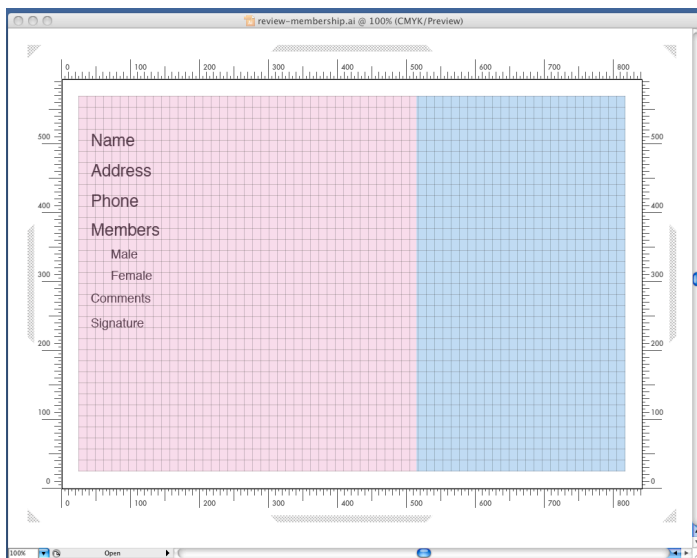
Step 4: Add Fields

Type in the fields that are specified at the beginning of this document. Set Name, Address, Phone and Members to Helvetica, 36px. Set the remaining fields to Helvetica, 24px. You should have something like the following:



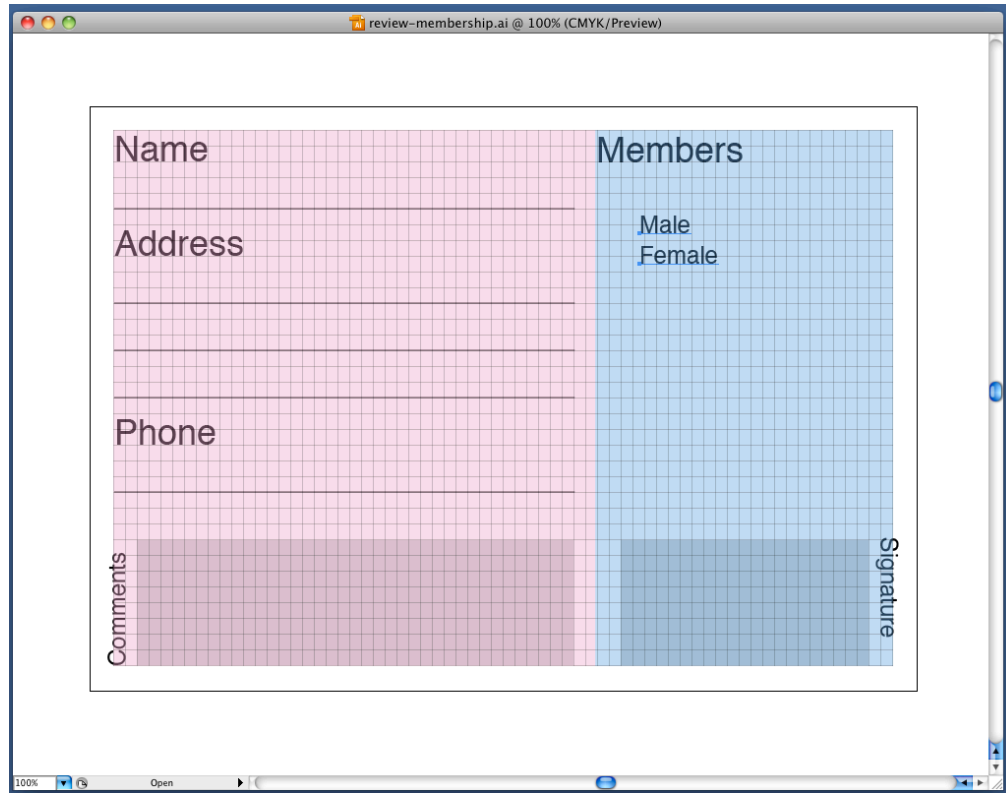
Step 5: Golden Section

Given the landscape orientation, using two columns for a layout like this would make it clean, spacious and easy to use. We'll use a golden section to decide on the column widths. Add a new Overlay ($\uparrow \text{⌘} \text{N}$) in slammer and change the distribution to golden section. Turn off the Bidirectional flag.



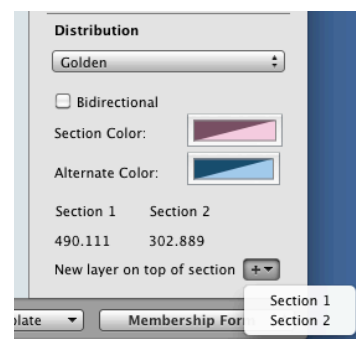
Step 6: Align the Fields

Set slammer in click through mode (⇧ ⌘ K) and align the fields so that they look like below:

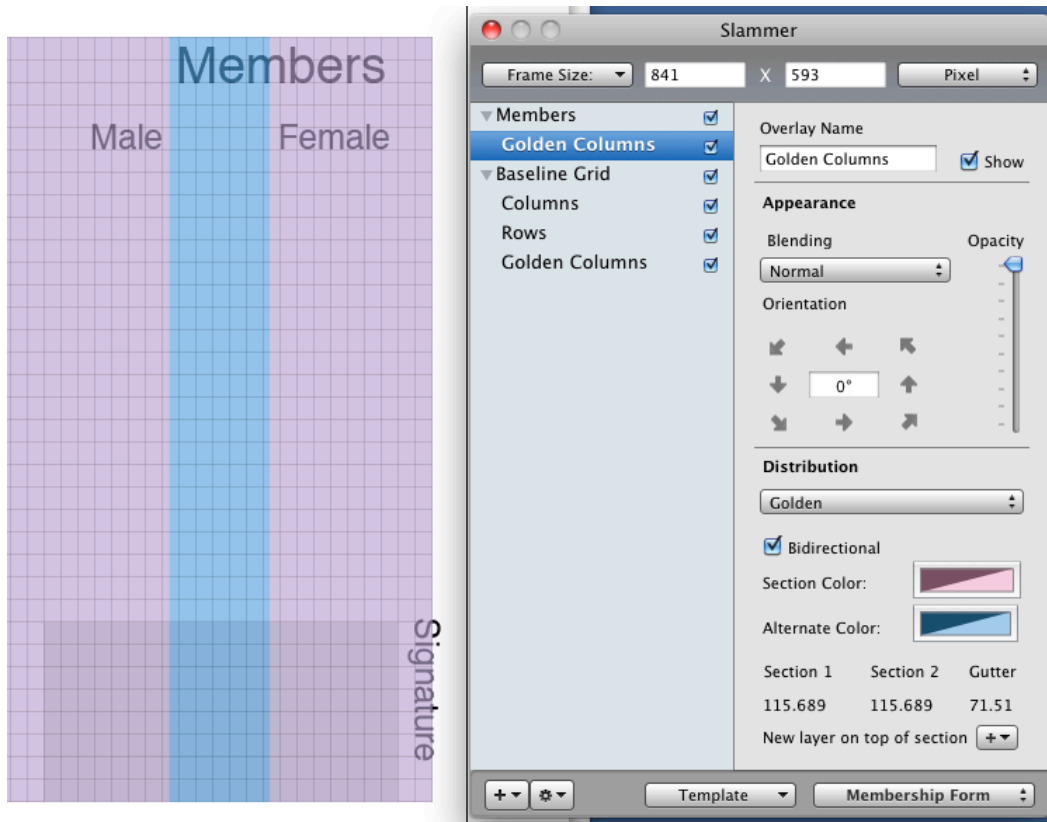


Step 7: Members Section

To create the male and female members list, let's make another golden section. This time we have some help though. Select the "Golden Columns" overlay (the previously created golden section) from the source list. Select *New layer on top of section->Section 2* from the popup menu at the bottom of the screen. This should create another golden section on top of the blue area above.

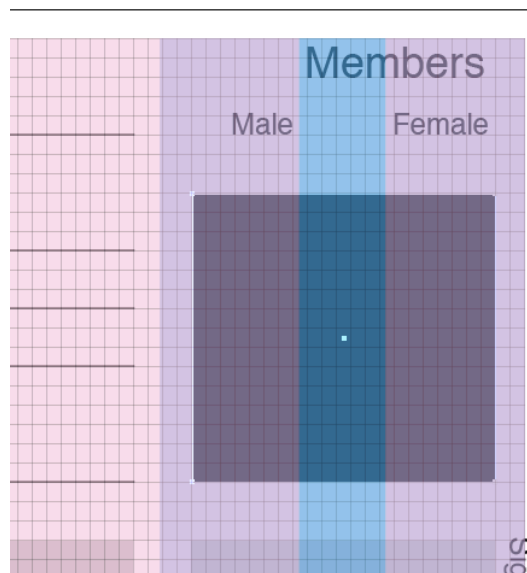


Rename the newly created overlay to *Members List* and turn on the Bidirectional flag. You should see a three column module on top of the Members area. Align the Male and Female labels to each side of the gutter with Male right aligned and Female left. Align the Members label to the left edge of the golden gutter.



Step 8: Male Female List

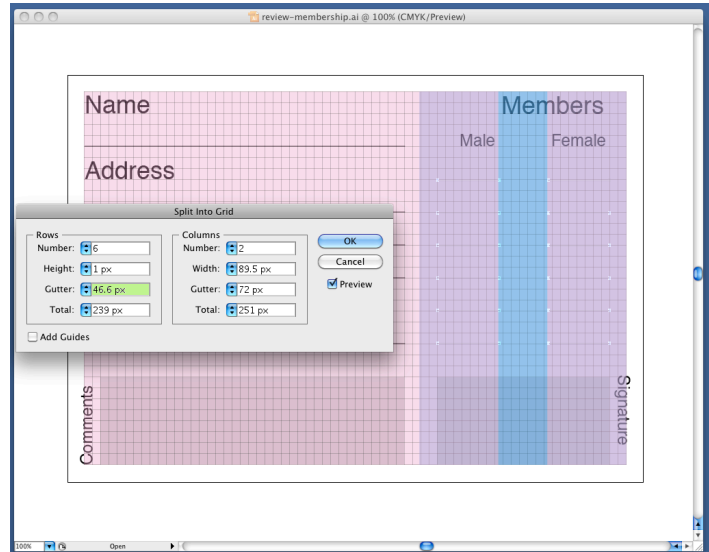
Now draw a rectangle whose top edge is parallel to the baseline of the Address label and the bottom edge is parallel to the line below the Phone label. The left and right edges should align to the signature box.



From the Illustrator menu select Object->Path->Split Into Grid. Set the number of columns to 2. Set the gutter value to 72 px approximating from the gutter value of "Golden Columns" in the Members Layer (See screenshot above).

Set the number of rows to 6 and set the height of each row to 1 px. Now we have a list of lines on either side of the golden gutter.

Align the lines to baseline grid columns and we are done.



The screenshot shows the completed membership form layout in Adobe Illustrator. The form is divided into sections for Name, Address, Phone, Members (Male/Female), Comments, and Signature. The layout is clean and professional, with clear labels and input fields.

You can download the completed membership form here: membership-form.ai and the Slammer template here: membership-form.slamm2

EXPORT

Slammer templates can be exported and imported as Slam2 files. Slam2 files are small and can be easily shared through any medium. This is a great way to share your layouts with coworkers or the community. If you have unique layouts that you'd like to be shared with the community, please email onlayout@ringce.com.

Grab

Slammer also allows you to grab images. You can grab a portion of the screen below Slammer with or without grids. You can also grab the Slammer grids alone as a composite image. These options are available through the Grab menu.

JSON

You can also export the Slammer template in the open JSON file format. The JSON file format allows developers to integrate the layout with other applications. An open source jQuery plugin that can display the Slammer grid using the JSON files is also available: [jSlammer](#).

THANK YOU

Thanks for reading the guide, you can shout out your questions or comments at our [support forum](#).