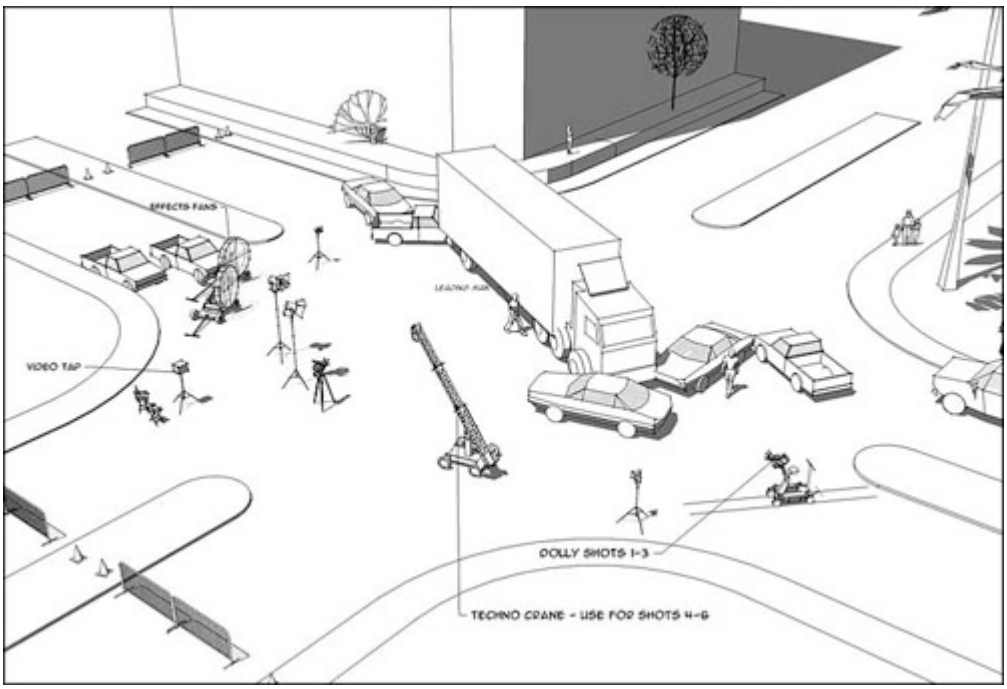


SketchUp 5 Film & Stage PREVIEW RELEASE

SketchUp 5 Film & Stage is a feature extension for SketchUp that was specifically developed for Directors, Cinematographers, Production Designers, Art Directors and other design professionals in the Film industry. The Extension facilitates a visual approach to solving complex spatial design problems and speeds the exploration of alternatives with an easy-to-use software environment. With the Film & Stage Extension SketchUp users can reduce the time and expense of filming by pre-visualizing their vision digitally first.

SKETCHUP 5 FILM & STAGE IS FOR...

- **Storyboarding**: Use SketchUp to block out a scene in 3D, with the freedom to experiment with many different camera positions and types.
- **Shot Planning**: Work from the storyboard out into the third dimension to see where you need to place your camera to get the right shot.
- **Set Design**: Plan your sets through the camera- and avoid building more than you need to build.

This preview release of SketchUp's Film & Stage extension includes an enhanced camera tool, as well as a collection of film-industry specific components.

Introduction

SketchUp 5 Film & Stage expands on the standard SketchUp "camera" in a number of important ways- allowing precise camera placement and positioning that is more analogous to the way physical cinematic cameras are used.

- **Specify a camera type:** You can specify a camera with a fixed aspect ratio for scene composition. Once an aspect ratio is specified, the scene's framing remains fixed no matter how the model window is resized. SketchUp for Film & Stage includes a number of pre-defined camera types.
- **Set the focal length:**You can simulate a large number of different lenses by setting the camera's focal length.
- **Create a camera:** Once framed, you can create a camera that preserves the shot as composed. The resulting camera can be manipulated with standard SketchUp tools to adjust its orientation.
- **Look through the camera:** You can "look through" any saved camera to see what the camera sees.
- **Moving a camera:** When you are looking through a Film & Stage camera, you can re-position it from the keyboard or mouse using traditional camera moves like pan, dolly, truck, pedestal and tilt.
- **Edit camera properties:** You can edit the properties of any saved camera after creation.

This enhanced camera tool can be used throughout the planning phases of any film production, from loose

storyboarding to shot analysis through set design and construction.

Using Film & Stage Cameras

SketchUp 5 Film & Stage adds a new type of camera entity that works in concert with SketchUp's standard viewing tools rather than replacing them. Think of Film & Stage cameras as physical objects and Pages (SketchUp's standard saved view) as controlling the point of view.

SPECIFY A CAMERA TYPE

The first step in any accurate cinematic visualization is to pick the camera type that you will be using. Film & Stage default cameras provide you with fixed aspect ratios in many of the most popular formats for contemporary film work. You are free to change the camera's properties at any time, but you will usually want to set a fixed aspect ratio before doing any composition.

To set a camera type, choose a camera type from the list of predefined cameras found under the "Select Camera Type" submenu of the "Camera" menu. By default, your choices will include the following camera types:

- Academy 35mm (1.37:1)
- 35mm Widescreen (1.85:1)
- 35mm Arriscope/Arrivision (2.36:1)
- 35mm Vistavision (1.50:1)
- Super 16mm (1.66:1)
- Standard 16mm (1.33:1)
- 65mm 5-perf (2.28:1)
- Photographic Still 35mm (1.33:1)
- Photographic 6x6 medium format (1:1)
- Photographic 4x5 large format (1.25:1)
- Video
- Video (D1)
- Video HD 16:9

If you don't see the camera type you want to use, you can modify the camera's properties after creating it. See "Editing the camera's properties" below for more information.

> *note: If you have a standard camera type that you would like to add to the preset list, you can add it permanently by editing the file "cameras.txt" found in the "previs" directory of your Plugins folder.*

SETTING THE FOCAL LENGTH

SketchUp's standard view controls can easily emulate physical camera controls for focal length. To set the focal length for a camera use the Zoom Tool.

With the Zoom Tool active, you can type a value for focal length into the VCB. For example, to set a 50mm focal length, type "50mm" into the VCB. To experiment dynamically, hold down the "shift" key on your keyboard, then click and drag up or down with your mouse to adjust the focal length.

Once you have saved a camera into your model, you can adjust it's focal length by editing the camera's properties through the "Edit Camera..." item in the camera's context menu. See "Editing the camera's properties" below for more information.

> *note: If you do not hold down the "shift" key, the Zoom Tool adjusts the camera's position rather than changing the focal length.*

> *note: The Field of View Tool works in a similar manner to the "shift" modified Zoom Tool. However, with the Field of View Tool, the camera position is adjusted proportionally to the focal length adjustment- giving you a "Vertigo Effect".*

CREATING A CAMERA

To create a camera, select "Create Camera" from the Camera menu. A dialog will appear asking you to name the camera (for future reference). Click on the "OK" button to create a camera. A new component will be added to your

model representing the camera's position and type- though you will not immediately see the component because you will be looking through the camera when it is created.

Immediately after camera creation, you can tweak the camera's position using the camera positioning tools. See "Moving the camera" below for more information.

> *note: If you select "Show All" from the "Camera" menu, you'll see a representation of the camera at the location specified, but you will no longer be able to move it using the camera positioning tools.*

LOOKING THROUGH A SAVED CAMERA

There are two ways to activate, or "look through" a saved camera. The first is to right-click on the camera, and choose "Look Through Camera" to return to the selected camera's point of view.

Alternately, you can select "Look Through Camera" from the Camera menu. A dialog box with a pop-up list of saved cameras will appear. Select the camera through which you would like to look from the pop-up and click on the "OK" button to proceed.

MOVING THE CAMERA

With a camera activated, a new set of camera motion controls are available for accurate positioning and orientation of that camera.

Positioning a camera with the mouse

> **click-drag** left & right to **pan**
> **click-drag** up & down to **dolly**
> **ctrl-click-drag** left & right to **truck** (use opt in OS X)
> **ctrl-click-drag** up & down to **pedestal** (use opt in OS X)
> **opt-click-drag** up & down to **tilt** (use cmd in OS X)
>
> *note:If you use the middle mouse button to orbit while a camera is active, you will be changing the active camera's actual position and orientation.*

Positioning a camera with the keyboard

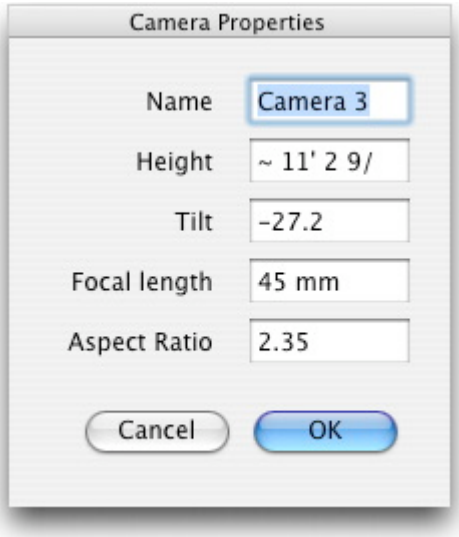
> You can use the arrow keys on your keyboard (**left**, **right**, **up** and **down**) to move the camera instead of moving the mouse. The same modifier keys (as above) can be used to switch between motion controls.

In addition, you can set the camera's height above the ground plane by keying a distance value into the VCB.

note: To point the camera at a particular entity in your scene, you can double-click on it with your mouse when the camera is active.

EDITING A CAMERA'S PROPERTIES

You can edit a camera's properties by right clicking on the camera, and selecting "Edit Camera..." from the context menu. If you are currently "looking through" a camera, you can access the camera properties by right-clicking on any empty space in your model view.



In the Camera Properties dialog, you can set the following properties:

- **Name**: the name of the camera, used to identify the camera in several different places
- **Height:** the camera's current height above the ground plane
- **Tilt:** the current camera tilt angle, measured in degrees
- **Focal Length:** the camera's current focal length, measured in millimeters
- **Aspect Ratio:** the decimal value for the camera's current aspect ratio.