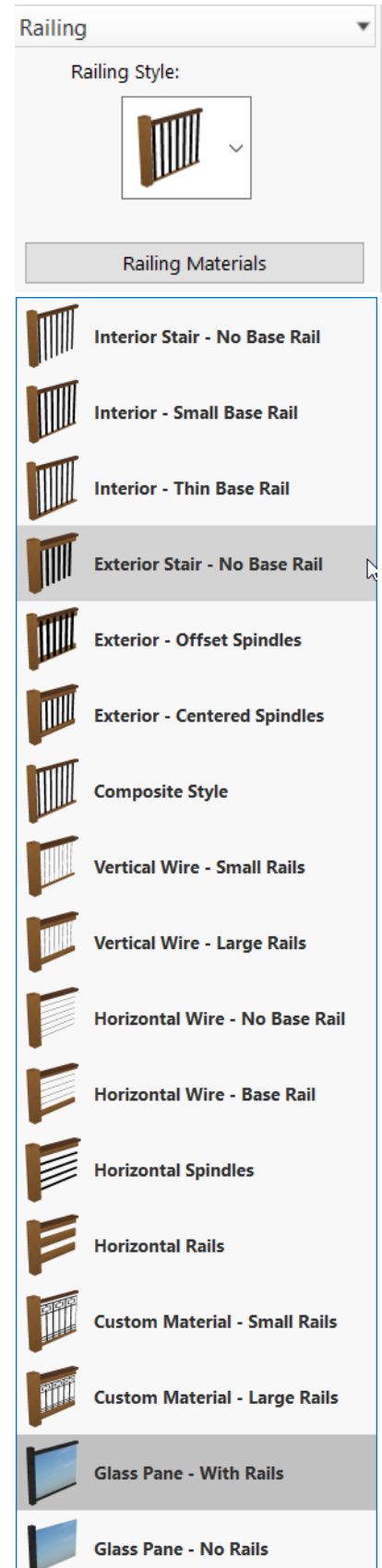**Railing styles and Custom posts**

- Advanced railing and custom posts.
- Added additional options for railing, decks, and staircases.
  - Can now specify fascia height on decks.
  - Deck railing can now be inset from deck edge.
  - Option to set individual deck posts as support post that extend to ground.
  - Can now specify post size.
  - Set post height for staircases.
  - Added top rail to railing. These will render as continuous rail flush over post if needed.
  - Texture top handrail cap separately than support rails.
  - Can now specify fascia height on decks.
  o Added Railing texture category to materials library.

  16 new railing styles. Offset spindles, glass, wire, composite, and custom material sections.
  2nd tier titles will have 5 additional styles. No glass, wire, custom material option.
    o Render custom 3D posts. No custom posts for 2nd tier titles.

Railing

Railing Style:

Railing Materials

- Interior Stair - No Base Rail
- Interior - Small Base Rail
- Interior - Thin Base Rail
- Exterior Stair - No Base Rail
- Exterior - Offset Spindles
- Exterior - Centered Spindles
- Composite Style
- Vertical Wire - Small Rails
- Vertical Wire - Large Rails
- Horizontal Wire - No Base Rail
- Horizontal Wire - Base Rail
- Horizontal Spindles
- Horizontal Rails
- Custom Material - Small Rails
- Custom Material - Large Rails
- Glass Pane - With Rails
- Glass Pane - No Rails

Additional custom posts can be created in Custom Workshop and saved to User Library.

Custom Material and Glass Pane railing styles will accept textures.

Materials work best if the size of the texture is set to match railing section width and height. Setting the height to "stretch" works well but the width is best if it matches the railing section width
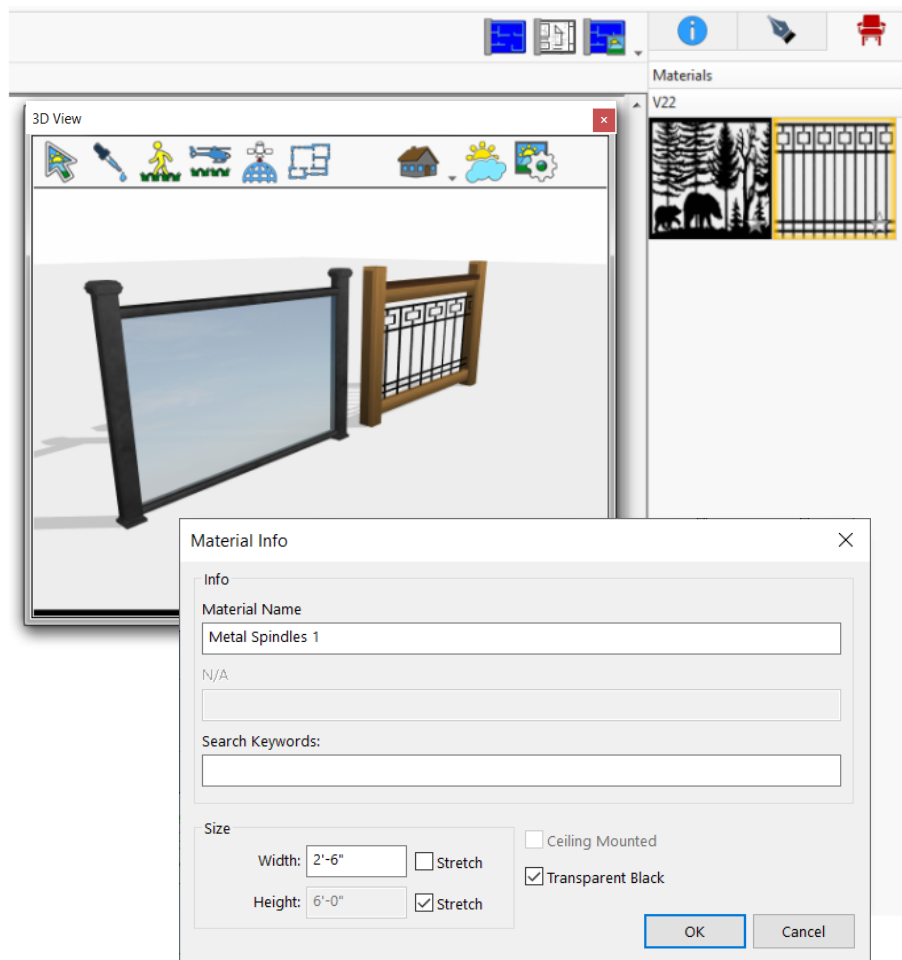
Layout Sheet Mode:

Setting up a layout

When in FloorPlan Home & Landscape Design mode click on the Sheet Layout Mode button to enter Layout Mode. If the layout has not been setup yet you will get the setup screens. Setup your paper size and add pages.

Layout mode is designed to print to scale on the same size paper as is set when creating the layout sheets. Margins will also need to match the target printer. It's recommended that the paper size and print margins be known before starting a layout however there is an option to automatically adjust the layout elements when changing paper size.
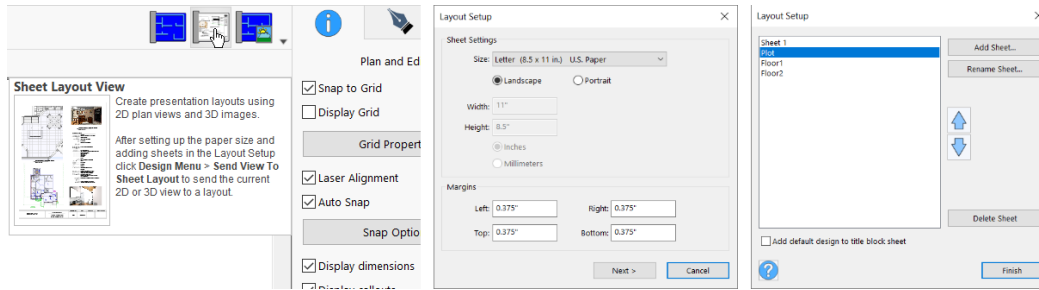
A title block page is automatically added for the user. The Add default design to title block sheet option will insert the default title block design for the user.

You can access the sheet set and page setup dialogs from the active sheet list.

Title Block Sheet

The title block sheet is where you want to draw any borders, add company or customer information. Elements drawn on the title block page will be drawn on all layout sheets but only editable on when on the title block sheet.
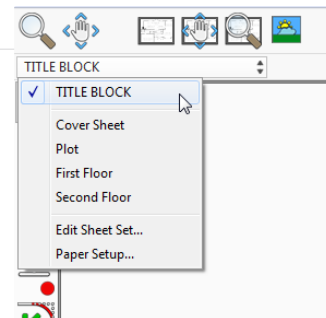

Title Block Template

Title block templates are included. There are multiple options available, each one optimized for certain paper sizes. When dragging a template on to the page choose the "Scale template to layout sheet size" option to automatically scale the title block to your sheet margins.
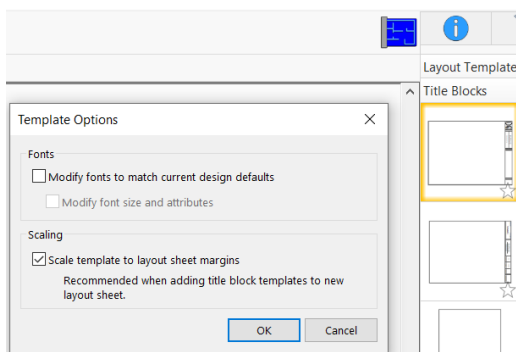
Additional layout templates can be created by selecting the desired objects and choosing Create Templates from the options button in the template navigation window.
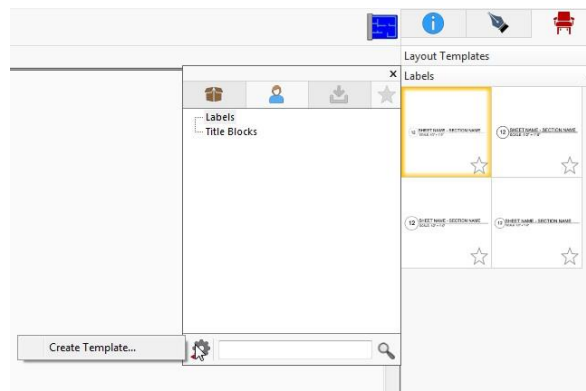
Creating views in Layout Mode
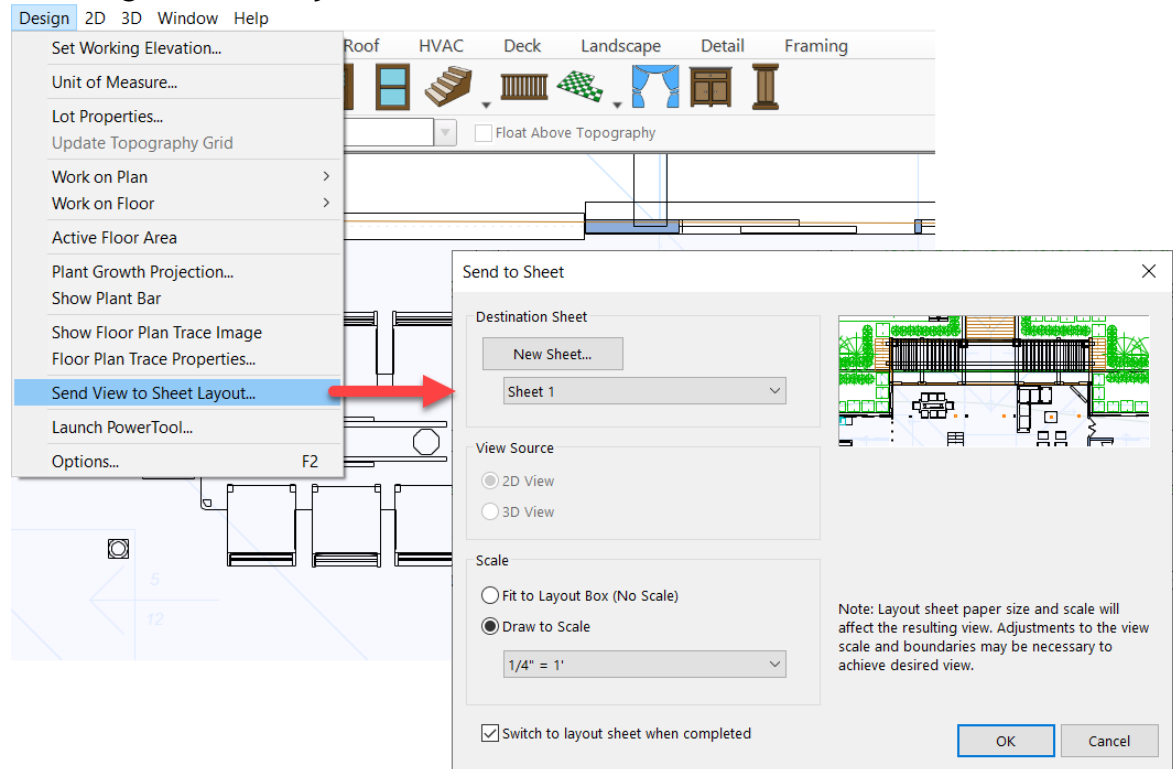
Layout views can be created manually in Layout Mode or when in home design mode use the menu command Design > Send View To Layout Sheet.

Send to Sheet Options:
- If the 3D window is visible, you can also send the current 3D view after saving it to a file.
- Scale options:

- o Fit to layout box: Maintains current view from Home Design Mode and is not drawn at a scale.
- o Draw to Scale: When draw to scale options is chosen the view in Layout mode may look different but the view will be centered in the layout view. Setting a new scale or other adjustments may be necessary depending on the sheet's paper size. If the paper size is small a smaller scale may be needed to fit desired drawing elements into the view.

Layout View Options and Editing

Select a layout view object to display the properties sheet. Many options to control what are displayed inside a view can be found here.

- • Retain view center point: Controls how the view is adjusted when modifying the size of a layout view.
- • **Scale:** Allows sheet to zoom in different scales. Use zoom will give the drawing in default or custom scale. Draw to scale option allows you to set layout drawing to different given scales.
- • **Source Floor:** You can switch to different floors by this option. Enabling Working floor only enables walls and 3D object traces of different floors.
- • **Visible Plans:** Button allows you to enable/disable different plan tools in Layout mode.
- • Topography, Foundation lines, Room Labels and Room fills can be enabled/disabled by those given check-boxes.
- • Dimension of the layout drawing can be enabled/disabled by those given check-boxes.
- • Print Layout Border: By default, borders of views are dashed light lines and are not printed. With this option turned on the border will be printed. The properties of the border can be adjusted on the draw style tab.

- • The standard pan and zoom tools edit the view of the entire sheet.
- • Use the layout view edit tools to modify a layout's center or zoom.
  - o Using the Control key will allow you to pan the layout view with by pressing the mouse wheel or with the standard pan and zoom tools.

- • Dimension lines drawn in layout mode have optional scale settings. Automatic option will use the scale of the layout view the dimension is drawn on. The same sized dimension drawn on different views will display different measurements.
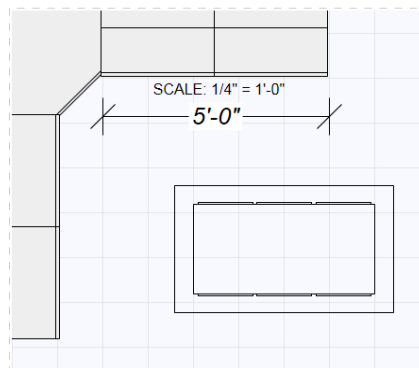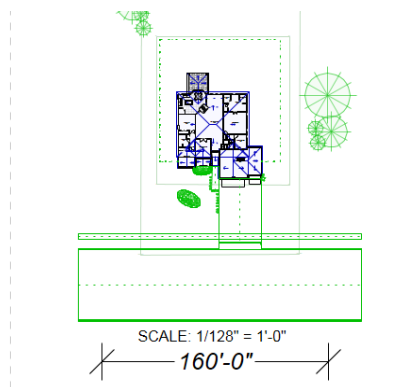
SCALE: 1/128" = 1'-0"

160'-0"

SCALE: 1/4" = 1'-0"

5'-0"

Printing

Layout mode is designed to print to scale on the same size paper as is set when creating the layout sheets. If trying to print on a different size paper the fit to page option will need to active and the layout will not be printed to scale.
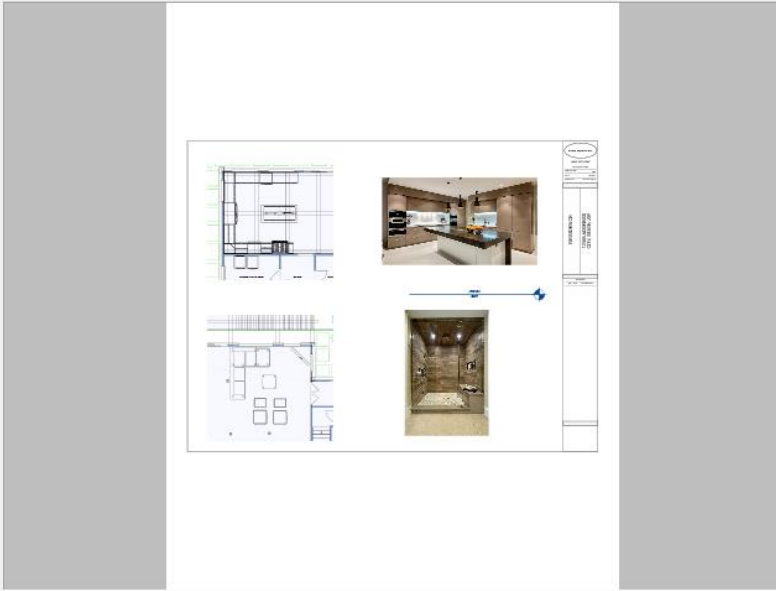
Options to print individual pages or all sheets (title block page not included).

Print Preview

[Printer Setup...] [Page Setup...]   ✕

Print Scale
- ◯ Print to scale
- ● Print to fit page

Sheet Options
- ● Print single sheet:
  - [TITLE BLOCK ▾]
- ◯ Print all sheets

[One Page] [All Pages]   [Previous Page] [Next Page]   [Print] [Cancel]

AEC Symbols:

CAD Details
o CAD Details moved from Templates to 2D Symbols library. These can also now be access via Detailer and Symbol Editor PowerTool.
o Resized the very small details to a useable size.
o Added additional CAD symbols and reorganized library.
o Total new CAD symbols count now at 1146
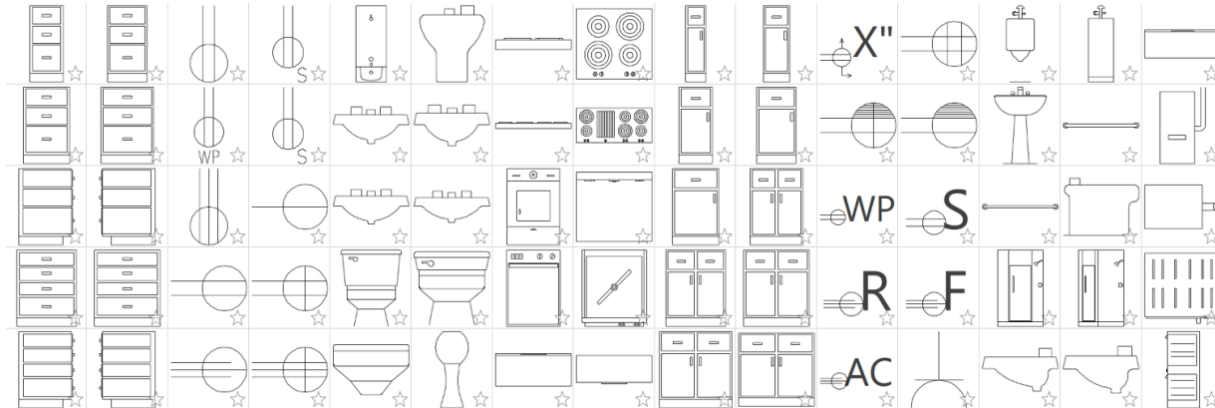
Glass Panes:

Glass panes added to windows, doors, and skylights.
o Glass panes can be turned on or off for each window, door, or skylight.
o Glass panes are ignored by default when applying materials or colors. To change the material or color of the glass hold the Ctrl key down when dragging onto the glass.
o The translucency of glass can be changed in the Design Options->3D Preferences > General dialog.

Import OBJ file

Added a new file filter to support importing OBJ files into FloorPlan. Support multiple line facet with N of vertices in each Facet.
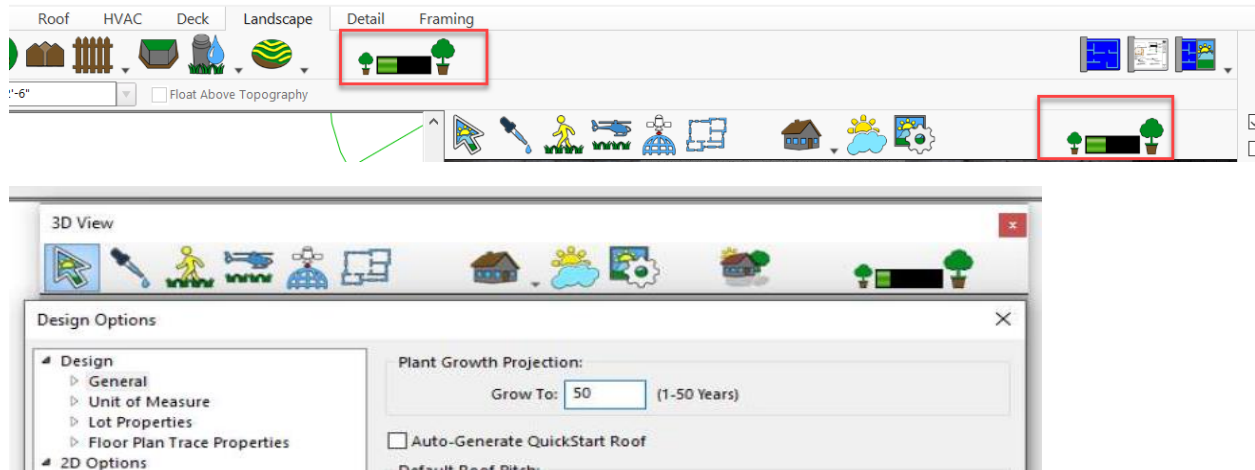
• Maximum N number of vertices in a Facet is 120

• Minimum N number of vertices in a facet is 3.

• Support colors

• Support textures

• Select OBJ File

• If OBJ File has a link of mtl file and it's in same place of OBJ file, read it automatically for color detail.
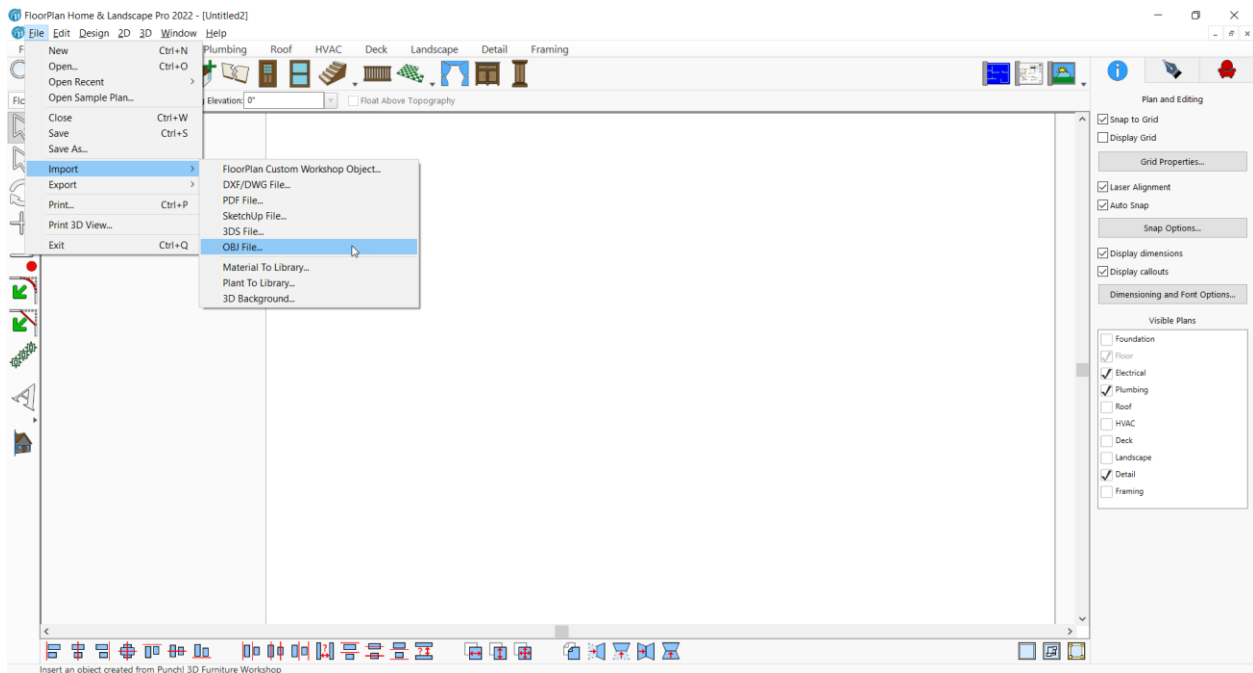
Plant Growth Slider:

Added Plant Age slider in 3D view
Updated both slider with the change in one slider

Import 2D PDF file

Added a new file filter to support importing 2D PDF files into FloorPlan.

- Import a pdf page.
- Page selection if a file has multiple pages.
- Support textures with different fonts.
- Support Vector.
- Support colors.
- Make a single object of the imported page.
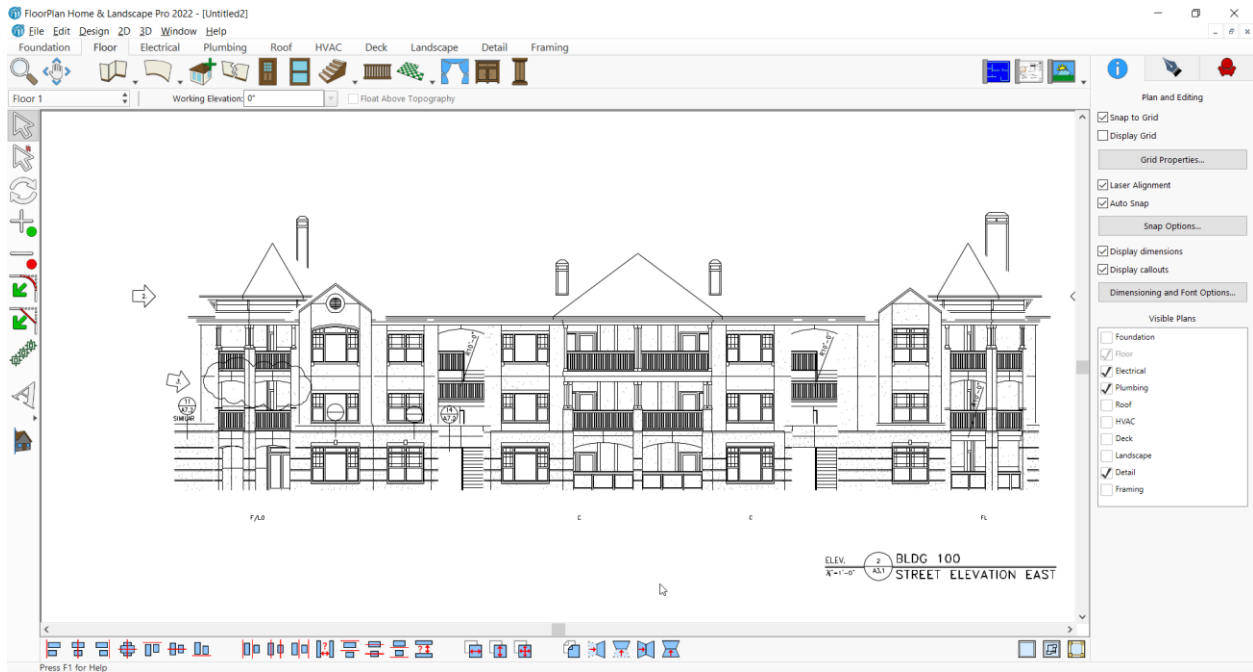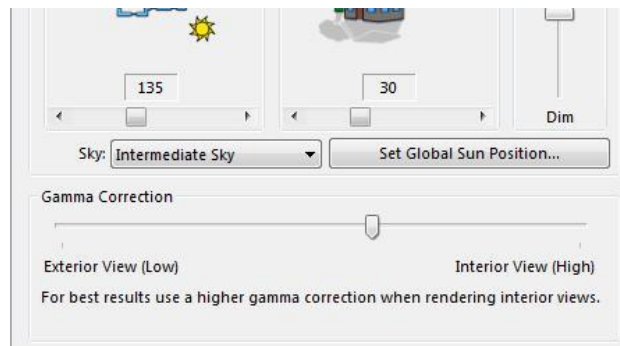- The size of imported objects can change.
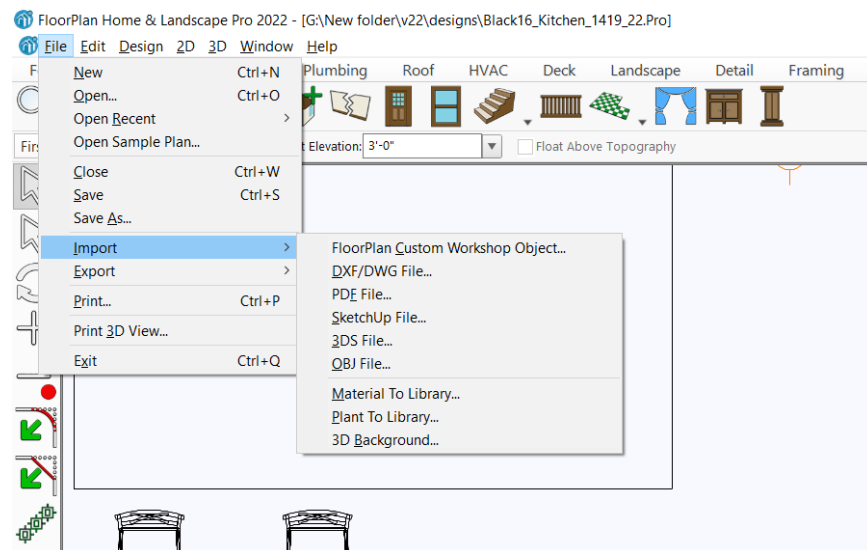
Photo Render (LuxCore)

Gamma Correction

The gamma correction slider can help control brightness of the scene. Interior scenes tend to need higher gamma.

Default exterior lighting settings with sun & HDRI on:

LOW GAMMA   HIGH GAMMA

Interior gamma example with fixtures set at default brightness levels:

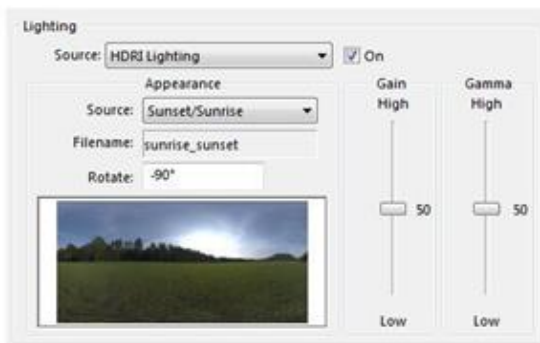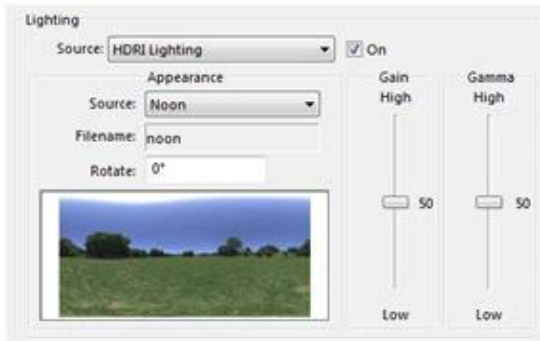LOW GAMMA   DEFAULT GAMMA   HIGH GAMMA
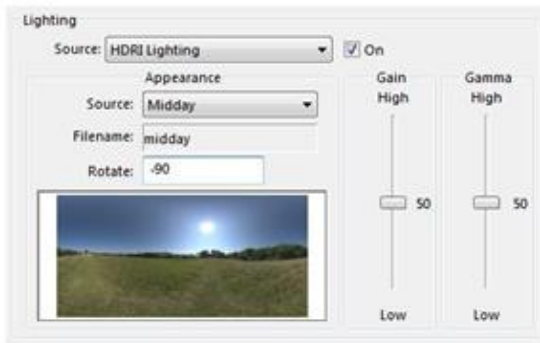
Exterior Lighting

Sunlight & HDRI (on by default):

Left image is default brightness, right image is with higher sun intensity.

HDRI Only

The gain and gamma levels may need to be adjusted depending on which HDRI source is used.

Light Emissions

The light emissions effects can be applied to any surface to make it emit light. The larger the surface the less intense effect likely needed. For example, a mid-range emission effect will produce very different results when used on a small bulb compared to a large tv screen.
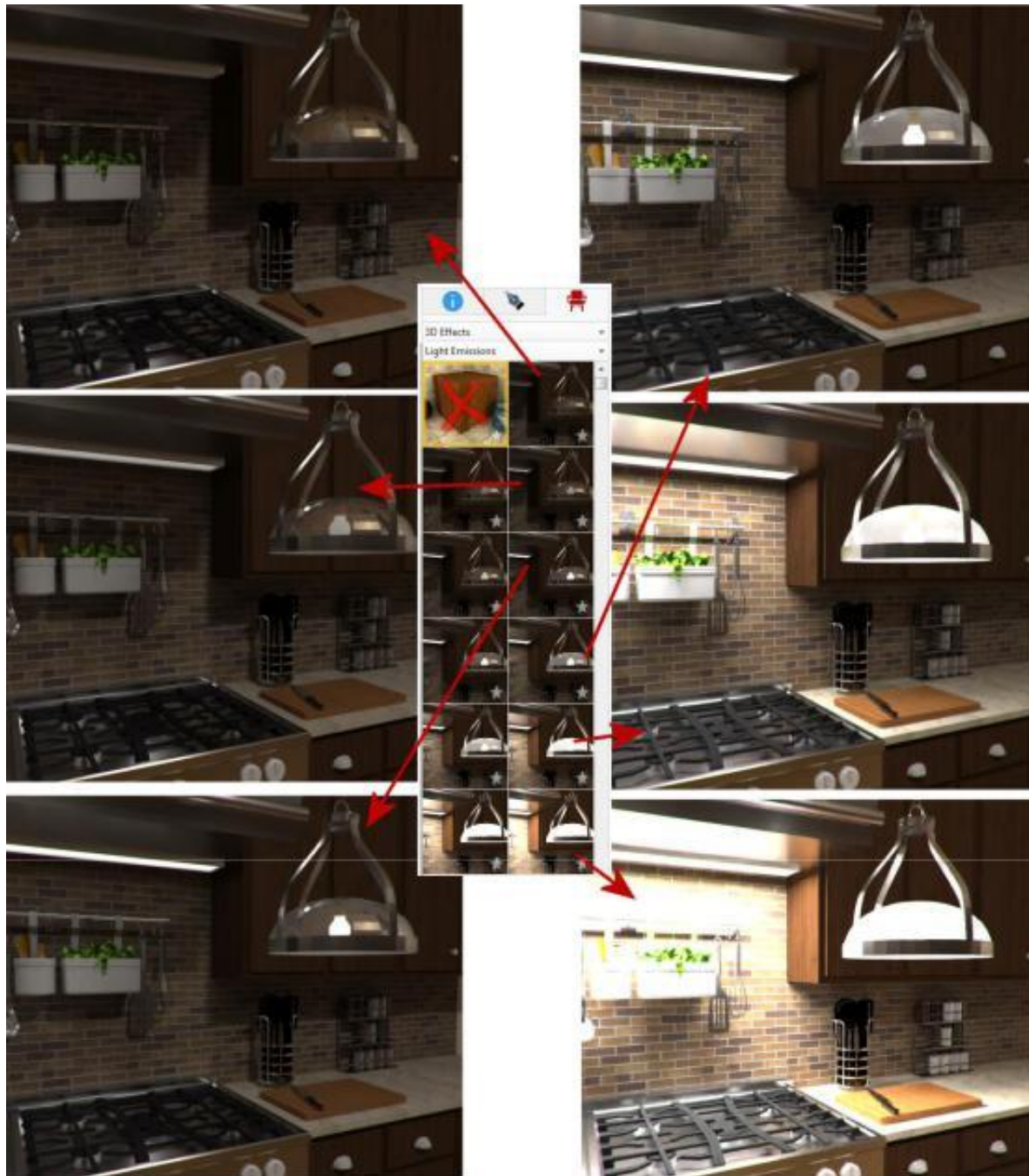
The color of the light emitted is determined by what color or texture is on the geometry.

The color of the light is based off the texture. In this example the emission effect is applied to the surface of the tv screen:

EMISSION 1   EMISSION 4   EMISSION 7   EMISSION 11
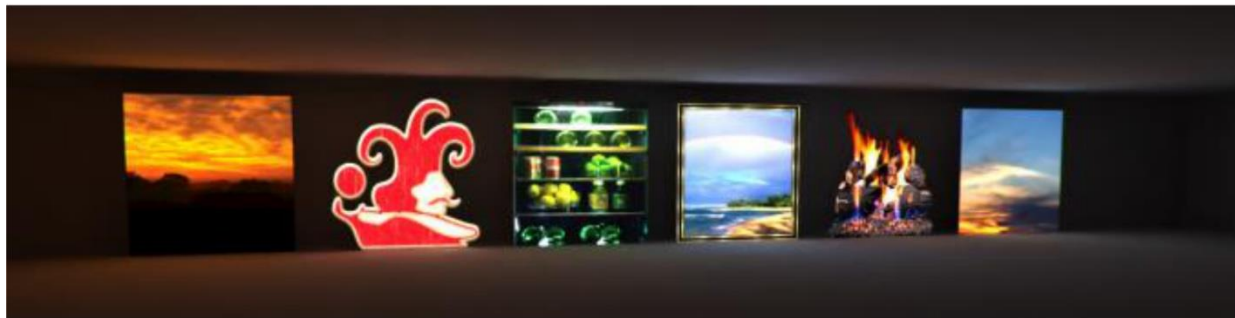
Rendering Time Limit

This time does not include exporting data to the rendering engine. The amount of time needed to create a quality render can vary greatly depending on hardware.

Draft Render: Time limit when using the preview button in the 3D window.

Final Render: When exporting from the file menu to an image file or final render option in the 3D menu.

Denoiser

The denoiser will remove lighting artifacts from the render (small white dots). The lower the denoiser the longer render time needed to remove artifacts. Higher denoiser the less artifacts but the render may be less sharp. Longer render times will both sharpen edges and remove artifacts.

OFF   LOW   MED   HIGH

60 SECOND RENDER