



Table of Contents

1.	Comprehensive Evaluation		.3
2.	Houseplan 1.0 Advantages		.3
3.	Comparison Details		.5
	1)	Modeling	.5
	2)	Material	.5
	3)	Rendering	.6
	4)	Animation	.6
	5)	Compatibility	.6
	6)	Output	.7

Houseplan 1.0 VS Revit 2024

Houseplan 1.0 is a powerful, easy-to-learn, lightweight and compatible 3D modeling and real-time rendering software that can create 3D models quickly and demonstrate your scheme independently. Its multiple modeling methods, convenient real-time rendering and plenty of 3D model and texture resources offer you great work experience and design results with the lowest budget.

1. Comprehensive Evaluation

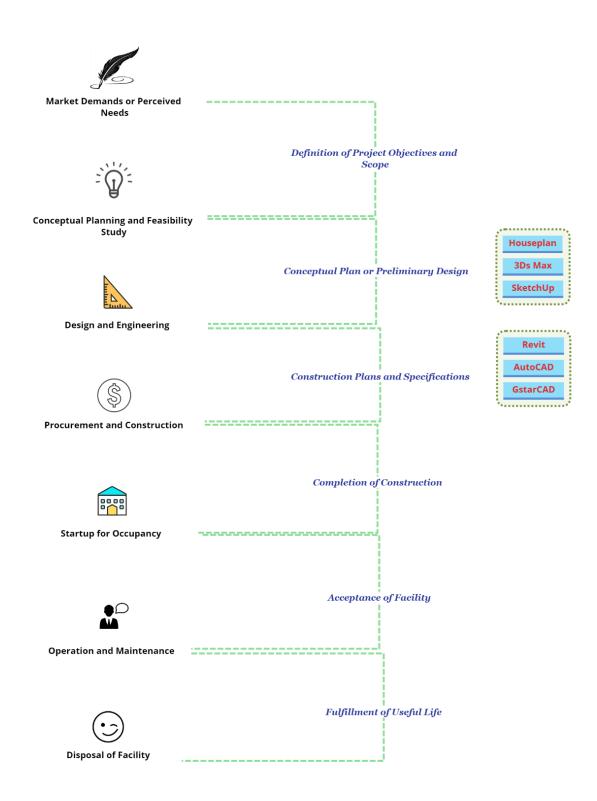
Both Houseplan 1.0 and Revit 2024 are software programs that can be used for modeling and rendering, and they are capable of completing various processes involved in modeling and drawing.

Revit 2024 can be integrated into the project's design plan and can obtain data from the design-construction-operation and maintenance phase. It can create an appropriate BIM model, identify and address project issues, and produce results that can be visualized and displayed effectively. This makes it particularly useful in the project's design and engineering, as well as procurement and construction stages. Houseplan 1.0, on the other hand, is widely used in 3D architectural and scene design. Although it has limited support for BIM, it has tremendous behavior in the realization of 3D modeling and rendering, which is mainly applied in the conceptual planning or preliminary design stages.

2. Houseplan 1.0 Advantages

- Affordable price and Perpetual License.
- Small software size
- Tools are easier to be understood, making it easier to learn.
- Modeling professional elements like buildings and roads with a few clicks.
- Supports inserting DWG drawing and extrude to a building directly.
- High level of integration, enabling quick results and high work efficiency.
- Real-time rendering without additional plugins.
- Comes with an animation library, allowing for easy insertion and movement.
- No need for additional plugins.

Brief Construction Workflow



3. Comparison Details

1) Modeling

Houseplan 1.0

Houseplan 1.0 is an exceptional 3D design software that can be used in creating houses and environmental models. It offers a wide range of modeling modes to cater to various design requirements and seamlessly integrates graphic design, architectural knowledge, computing, and other advanced technologies.

Houseplan 1.0's unique "Sculpture Method" employs specialized functions to simplify the design of buildings and roads, enabling users to efficiently construct models through parameter input, extruding operations, and component carving.

Furthermore, Houseplan 1.0 has developed a structured lightweight advanced modeling module that boasts simple yet powerful features, high integration, and ease of use. The module's tools effectively meet complex modeling requirements and offer the modeling capabilities of traditional software, while its user-friendly interface makes it accessible to both professionals and amateurs alike.

Houseplan 1.0's comprehensive modeling functions enable users to create complex models effortlessly. It supports the creation of planes and 3D objects such as rings, cones, and pyramids, as well as commonly used editing functions for elements like points, lines, and planes, including extrusion, deformation, lofting, lattice, and mapping. With these advanced features, Houseplan 1.0 enables users to quickly build 3D simulation scenes with ease.

Revit 2024

Revit 2024 is a comprehensive BIM modeling platform. The most prominent feature is the integration of design information and data, which is very effective for the design of construction drawings. It can better associate 2D engineering drawings with 3D models and facilitate modification and management of engineering drawings, at the same time it supports parameterized settings for components. It can also analyze the real environment to help project stakeholders better understand the impact of cost, construction period, environment, etc.

Despite Revit 2024 having so many advantages, it still has many deficiencies in design, such as the parameter rules of the software are not suitable for global changes caused by changes in the structure angle of independent models, and the ability to model complex planes is lacking.

2) Material

Houseplan 1.0

An open material system has been developed in Houseplan 1.0, equipped with a user-friendly material editor. It features a unique layered approach to building materials and supports easy and efficient material pasting.

Materials can be enhanced with various effects such as bump, reflection, self-illumination, and glow. For water surfaces, users can choose between Mapping Reflection and Real Reflection, and adjust parameters such as Glossiness, Reflection Intensity, Fresnel Offset, Fresnel Index, Ripple Height, and more. For simple models, Houseplan 1.0 provides Modal Adjustment and Free Adjustment tools, while more complex models can benefit from the UV Editing tools, which enable the assignment and adjustment of editable polygon materials.

Revit 2024

The commonly used texture mapping method in Revit 2024 is done using the "decal" tool, which can only apply textures to flat surfaces. It takes some effort to apply materials to curved surfaces, as Revit 2024 does not have a UV editor.

3) Rendering

Houseplan 1.0

Houseplan 1.0 provides users with a comprehensive simulation environment that accurately replicates real-world physical characteristics, such as geometry, materials, lighting, shadows, and weather. The rendered images resemble photos and are easily editable. With real-time rendering capabilities, users have access to various environments and customizable scene parameters.

The software also supports synchronous dynamic rendering, powered by a high-performance rendering engine that resolves the challenge of flexible 3D graphics editing and simulation synchronization. So, you can design in interactive, responsive environments that immediately display the rendered results.

Revit 2024

Revit 2024 comes with its own Mental Ray rendering engine, but, it's not easy to learn.

4) Animation

Houseplan 1.0

Houseplan 1.0 has an animation entity library with set actions, which allows adding animation entities to scenes directly, and formulating and editing the animation path at the same time. The operations are simple and fast.

Revit 2024

Revit 2024 has the capability to create animations of objects, but the specific way the animation is presented needs to be set or configured manually.

5) Compatibility

Houseplan 1.0

Houseplan 1.0 supports importing 2D and 3D data and commonly used pictures in osgb(tile), rvt, skp, obj, 3ds, dwg, fbx, cgr, dem, tif, jpg and other formats, and also supports their editing and application. It also allows importing DWG drawings and

extrude directly, as well as the import of data such as oblique photography and point cloud data.

Revit 2024

Revit 2024 supports formats like rvt, dgn, dwf, dwg, png, jpg, gbxml, html, etc.

6) Output

Houseplan 1.0

1) 2D and 3D Output

Layouts can be exported as DWG/DXF, or many other 3D formats.

2) Publish

Provides tools specifying camera points and video paths to export images and videos. Also, you can publish your design with a .exe file that can be operated independently to view images and videos, draw new video paths, display properties, and switch weather environments.

3) Image

You can set viewpoints and output a variety of image formats.

4) Video

Houseplan 1.0 specially designed an easy-to-use video module, users can formulate and edit drawing paths and view angles, preview or save video results, and then quickly output roaming animations to mp4, mkv and other video files.

Revit 2024

The scheme can be exported as 2D and 3D formats files as well as pictures and videos.

