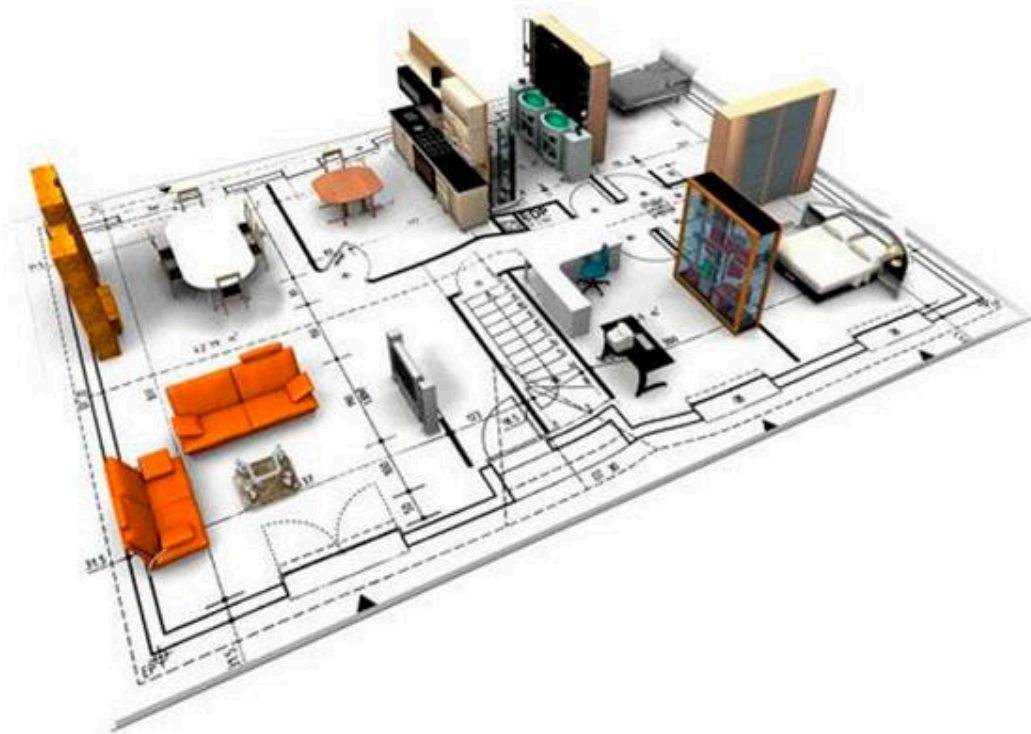




Revit Family Creation: All you need to make the Procedure a Cakewalk



Revit Family Creation is an essential facet of the BIM realm. It inculcates basic building blocks that facilitate the curation of a building's 3D model. These blocks entail smaller components such as doors, windows, walls, furniture, and more.

Such BIM objects are based on a specific geometry that reflects a certain form of virtual representation. From a bigger perspective, complex designs can be achieved in a streamlined manner with the standardization of such Revit-based families.

Let's explore more about what Revit Family Creation has in store.

Who can benefit from BIM Family Creations?

Here are the various stakeholders and professionals within the AEC industry who can benefit from BIM Family Creations:

1. Architectural Firms
2. Manufacturers
3. Product Designers
4. Furniture designers
5. Freelancers in various realms such as design, architecture, etc.

Types of families that can be obtained from BIM Content

- **System Families**

The most basic kind of Revit families, System Families are usually built in the Revit software. These are quite simple in composition and don't have to be created separately.

- **Loadable Families**

Loadable families entail family creations that are stand-alone and can be put to use for a wide array of projects. These can be easily saved externally and curated on flexible parameters based on the project requirements.

- **In-Place Families**

Such families can only be utilized for a particular project. In-place families can not be used beyond the barriers of the project that they are specifically created within. This is because the geometry is adaptable to other environments.

Create an effective Revit Family with simple steps

- **Selection of template**

Pick the suitable template keeping in mind the requirements of your project. This could be ceiling-based, rood-based, wall-based, etc.

- **Definition of categories**

Define the subcategory for the selected template. This facilitates enhanced visibility of geometries.

- **Creation of Reference**

Opt for the 'Reference Line' and 'Reference Plane' tools to create a reference point for the Revit family.

- **Optimization of Dimensions**

Put the dimension tools to use and optimize the dimensions of the elements as per your project requirements. This establishes a concrete parametric relationship.

- **Creation of model geometry**

Curate the model with the details that have been specified in the previous steps. At the end of this step, your geometry will be all prepared.

Top 6 Benefits of Revit Family Creation

- **Facilitates customization**

Revit Family Creation paves the way for the standardization of structural elements by facilitating the provision of flexible parameters.

- **Infuses consistency**

Since the design and sizes are specified before production, there is a sense of consistency in the creation of these elements.

- **Enhances productivity**

Everything from the production to the setting up of parameters works by each other.

- **Amps up the performance**

Since the models are created with utmost precision and made free from errors, the performance is automatically enhanced.

- **Compatibility with platforms**

Based on the type of Revit Family under consideration, these BIM-based Revit families can be used within the realms of various environments.

3 Primary Concerns associated with the creation of Revit Families

- **Stability**

Stability issues usually come into being while switching between different types of environments. This can occur both while working with the same or different types of Revit Families.

- **Precision of dimensions**

Dimensions form an integral part of the parameter specification within Revit Families. Therefore, incorrect dimensions, such as length, breadth, and height can hamper the seamless creation of Revit Families.

- **File size**

Using multiple families or incorporating a range of elements within a single family can add to the file size. This leads to issues with the project performance and file exchange.

Top 5 Services within the Landscape of Revit Family Creation

The following are some popularly used services that fall within the spectrum of Revit Family Creation:

1. Geometry Creation
2. Parametrization

3. Library Management
4. Template Curation
5. Scan to BIM

Common Queries: Revit Family Creation

- **What are Revit Families?**

Revit Families include the basic building blocks that facilitate the curation of a building's 3D model. These blocks entail smaller components such as doors, windows, walls, furniture, and more.

- **What are the benefits of using Revit Families in BIM?**

The following are the benefits of using Revit Families in BIM:

- Facilitates customization
- Infuses consistency
- Provides flexibility
- Enhances productivity
- Amps up the performance
- Compatibility with platforms

- **What are the different types of Revit Families?**

Following are the different types of Revit Families:

1. System families
2. Loadable Families
3. In-place Families

- **How can I create a Revit Family?**

Follow these steps to create a Revit Family:

1. Select a template
2. Define a category
3. Create a Reference
4. Optimize Dimensions
5. Create the model geometry

- **What are some concerns associated with Revit Families?**

The following are the primary concerns associated with Revit Families:

1. Stability
2. Precision of dimensions
3. File size

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