

Revit Architecture: Adding Families

In this White Paper we will outline different family types and the procedures for loading families into a project and placing families in a project.

All Revit Users

Understanding Different Family Types

There are various family types and many behave somewhat similarly. In some cases you can change the family definition from one category to another. But in some cases, the behaviour is unique to a family, and families can't be changed to another category.

There are two important things to remember.

First, schedules are based on family categories. So when you create a schedule, you'll be scheduling inside a single category as shown in Fig 2.

Second, you load families into your project based on their category. The Revit library is organised into real-world categories, so even if you've never used Revit before, finding the right content should be straightforward. See Fig 1.

Family Types

Revit enables you to create several family types:

- System Families, such as walls, roofs, floors, text, and dimensions, have predefined parameters that you can modify. You create new types of these families by modifying existing parameters using element properties.
- In Place Families are created in the project and are dependent on the model geometry (e.g., custom gutters, special trim, or built-in furniture). They are only available in the project in which you create them.

- Component Families are defined by drawing elements in the Family Editor. Examples of these families include doors, windows, furniture and profiles. They are separate from the project file, but can be inserted or loaded into a project. See Fig 3. You can create many types in one family using g different sizes and materials. Revit includes family templates for most elements to help you get started. These families are loaded into a project.

Host vs. Stand-alone Families

Families can be Host-based or stand-alone. Host-based families include those that are dependent on host (wall, ceiling, floor, roof, or face.) stand-alone families, such as desks and chairs, do not need a host. How you create families depends on the way you want to use an element. For example, if you were creating a floor or table lamp, you would create a stand-alone family.

Understanding Different Family Types

- Families are based on categories
- Schedules are based on these categories
- Families are also loaded by category

Fig 1: Load Family from Library

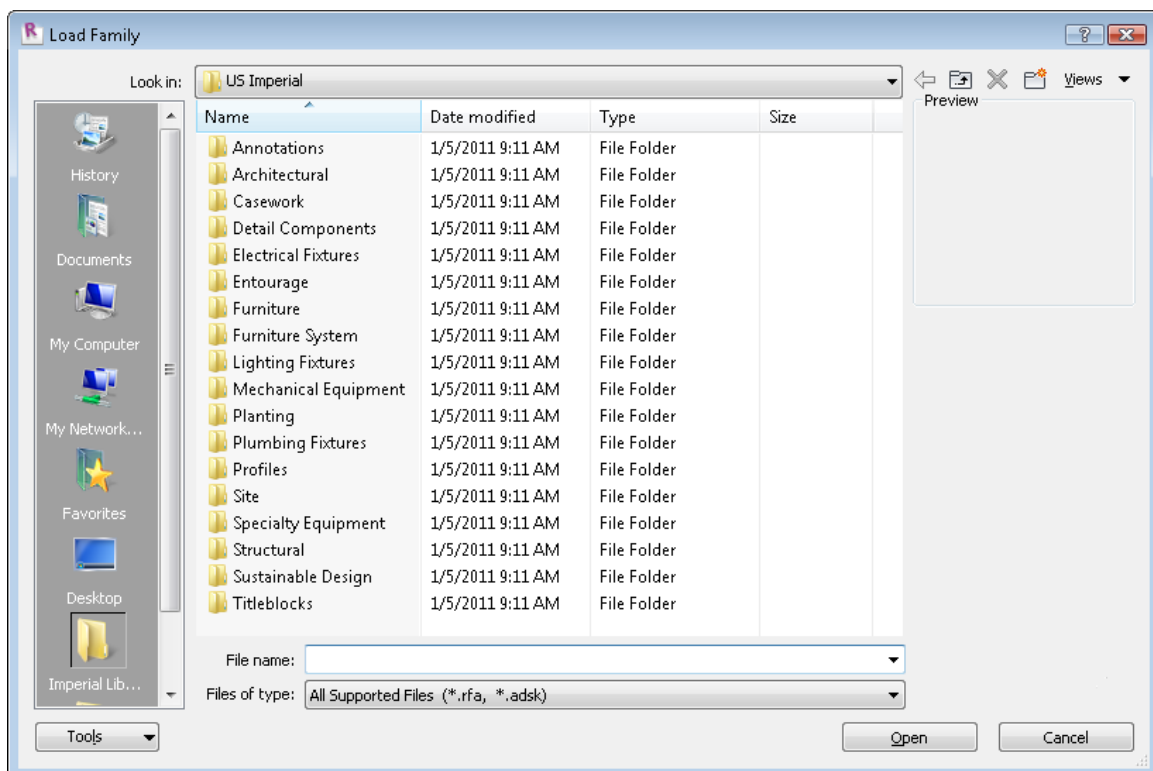
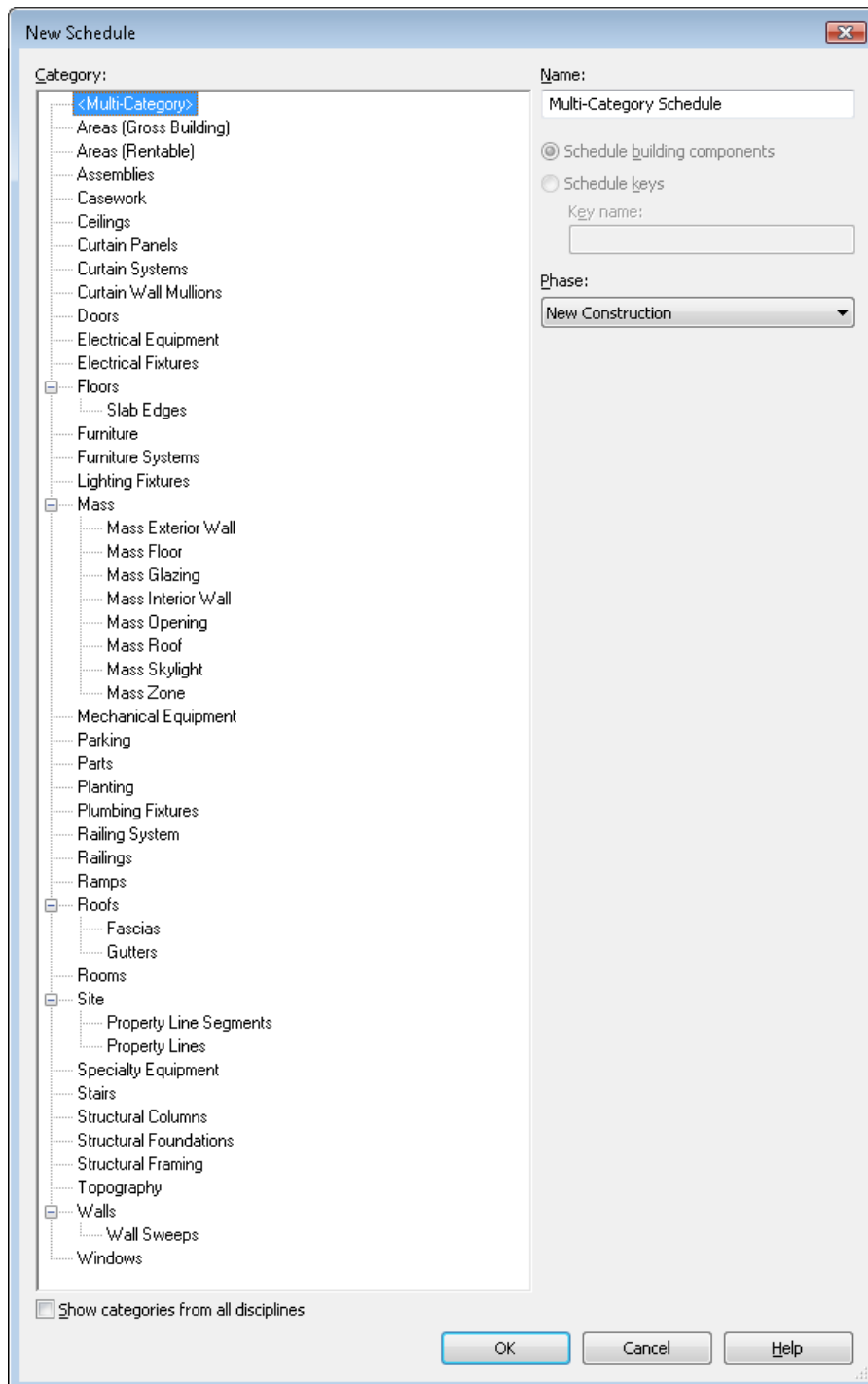


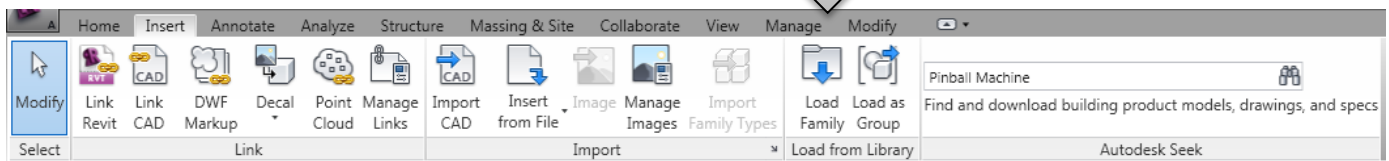
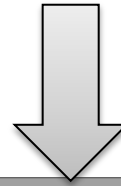
Fig 2: Family Categories



Loading Families

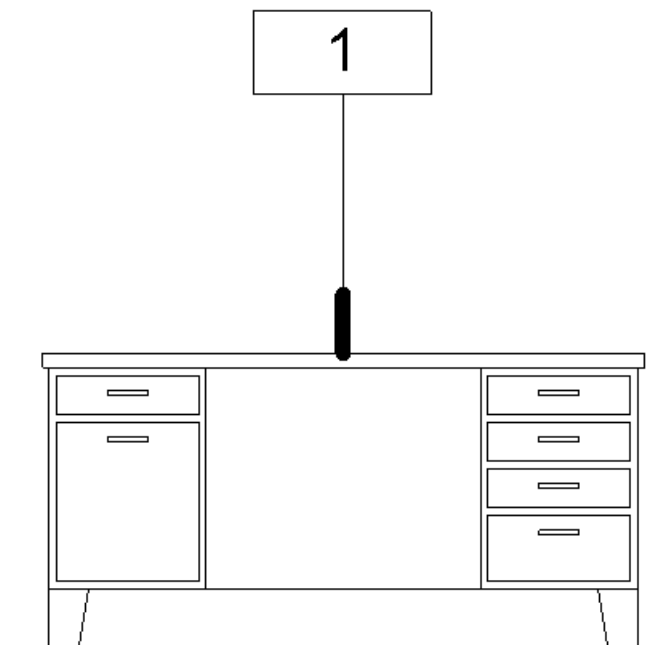
- From Insert tab of ribbon
- Drag-drop from Windows Explorer
- Within tools (Load Family button)

Fig 3: Load Family from Ribbon



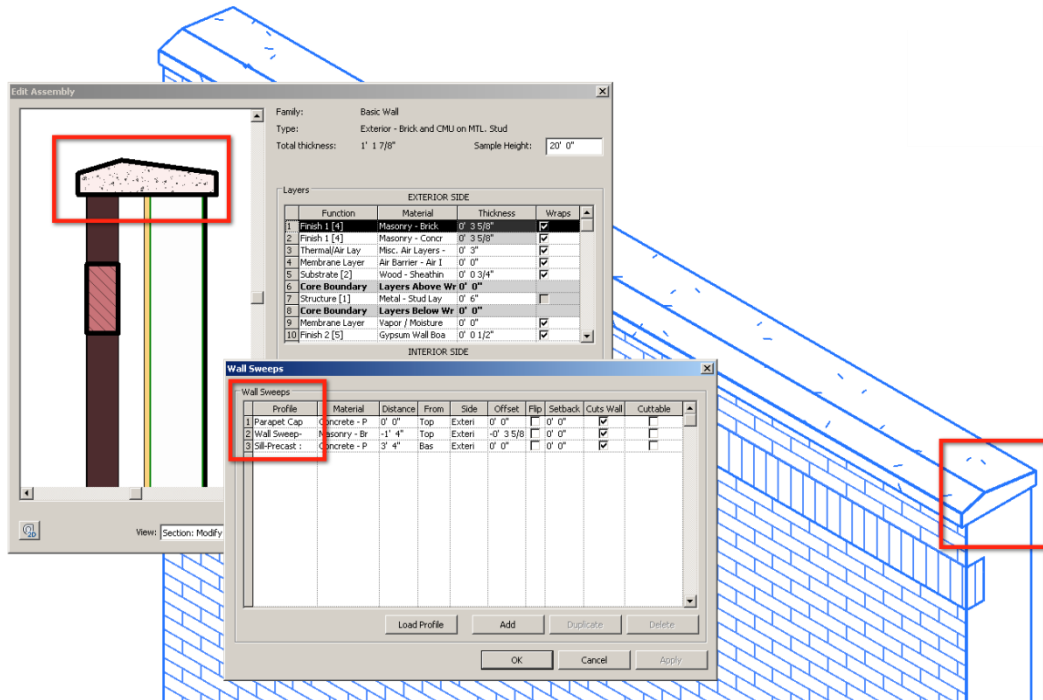
Placing Families

- Annotations



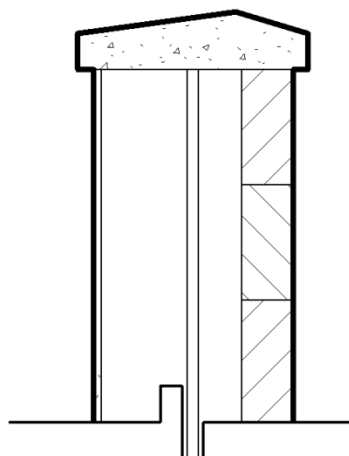
Placing Families

- Profiles



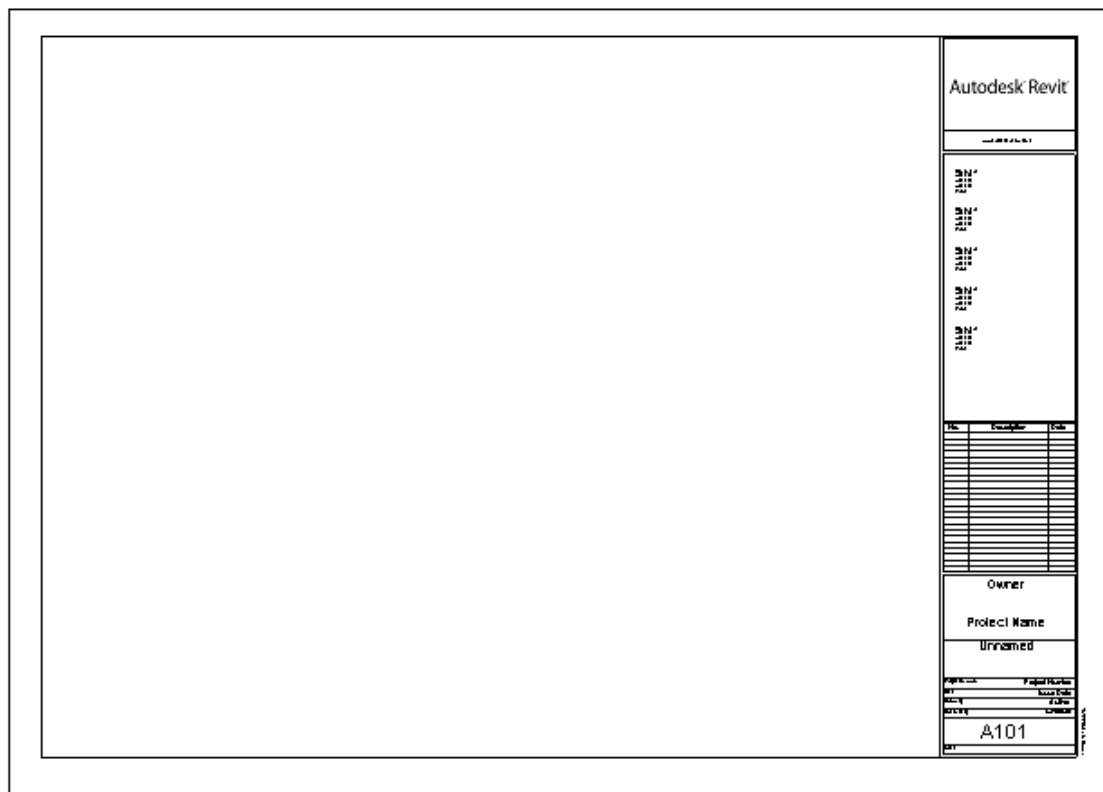
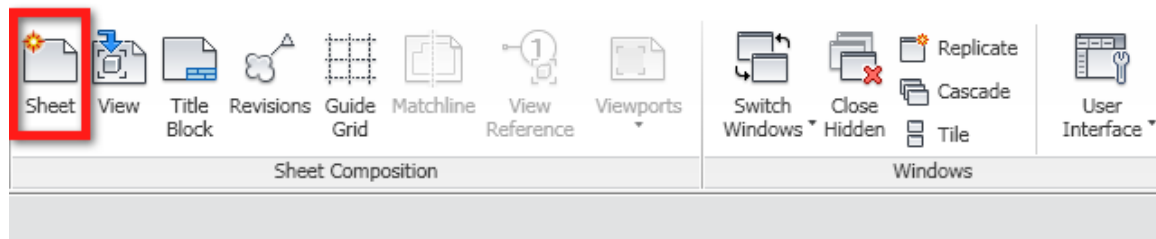
Placing Families

- Detail Components



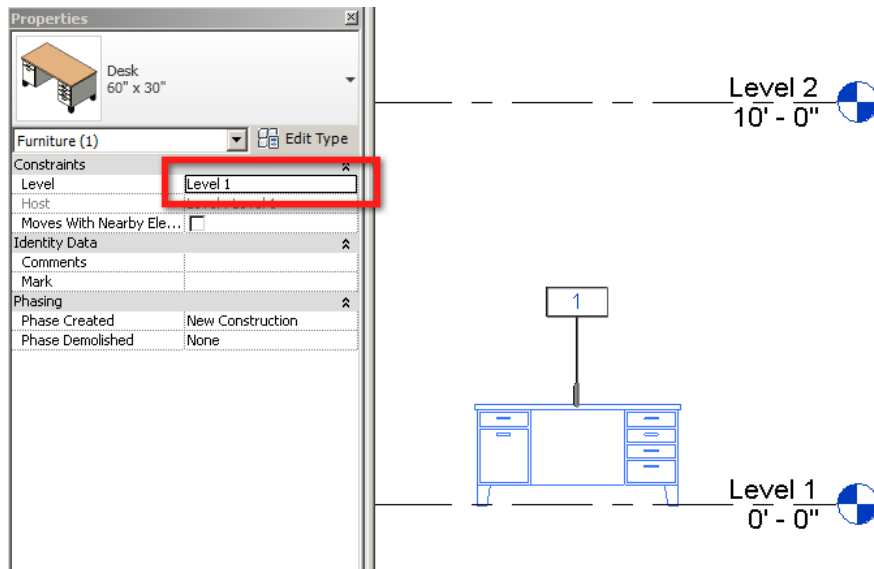
Placing Families

- Title blocks



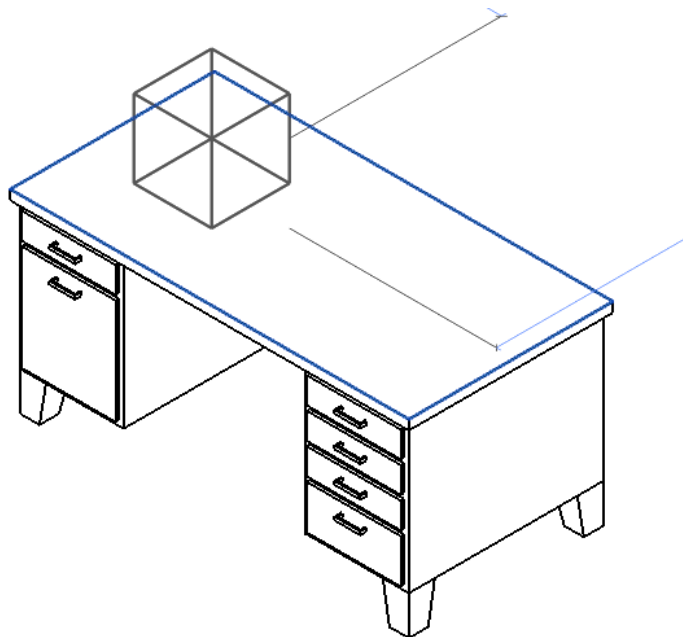
Level-Based Families

- Will be deleted if a level is removed
- Objects move with the level



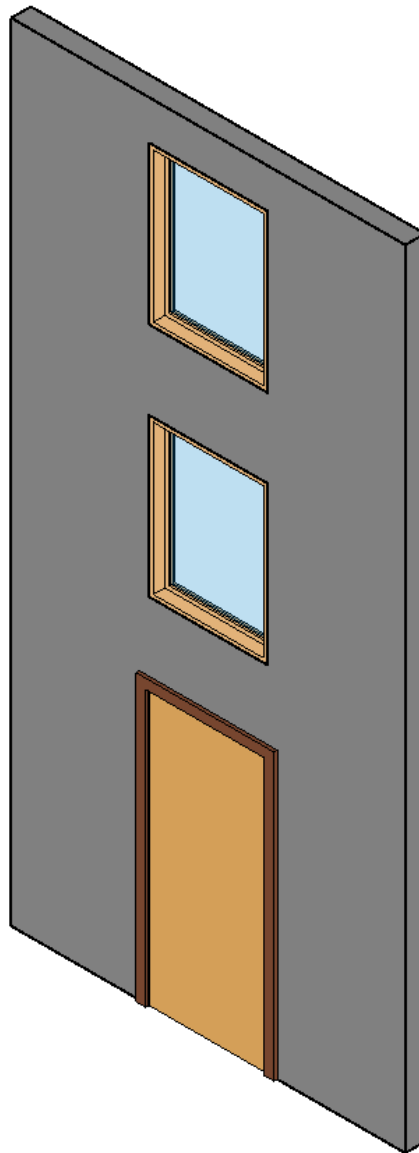
Host-Based Families

- Hosted on other objects



Hosted Families

- Objects that are dependent on other elements
- Usually cutting through the host



This concludes an overview of family types in Revit Architecture. In a future White Paper for the CADline Community (cadlinecommunity.co.uk) an overview of modifying families will be covered.