Manage Cost Modifiers Using Libraries

Cost modifiers are multipliers or adders that can be applied at multiple BUILDER levels to adjust section replacement costs. Modified costs will roll up the hierarchy and also affect CI roll-up weights, work plan item costs, and scenario costs. The ability to apply cost multipliers and adders from the Site level down to the individual Section level provides great flexibility and control in accounting for factors that affect costs. Common factors that change costs include security, health and safety, and containment requirements.

Cost modifiers are created and managed in Cost Modifier Libraries. They can be created at the Organization or Site level. The modifiers in a library can then be assigned on the Cost Modifiers tab of Sites, Complexes, Buildings, Systems, Components, or Sections.

When a cost modifier is assigned to a Site, Complex, Building, System, or Component, that modifier is "inherited" down the BUILDER hierarchy and calculated for all child Sections below the parent level at which the modifier was assigned. A modifier can also be assigned at the Section level, in which case it only applies to that individual component-section. A Section can inherit one or more cost modifiers from a parent as well as well as have its own modifier applied. For example, if the Building multiplier is 2, the System multiplier is 2, and the Section multiplier is 2, the Section cost will be multiplied by a factor of 8 (2x2x2).
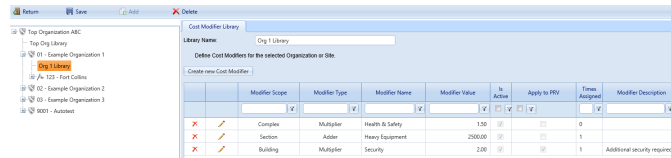
Cost Modifier Types

- **Cost Multiplier**—a multiplying factor applied to all child Sections. For example, if a Building has a 1.5 cost multiplier, then the 1.5 multiplier will be applied to all Sections below the Building in the hierarchy.
- **Cost Adder**—a specific cost applied to all child Sections. For example, if a Building has a $2700 cost adder, then all Sections within that Building will be assigned a $2700 cost adder.

Managing Cost Modifier Libraries

To manage cost modifier libraries, select **Tools > Library > Cost Modifiers** starting at the main menu.
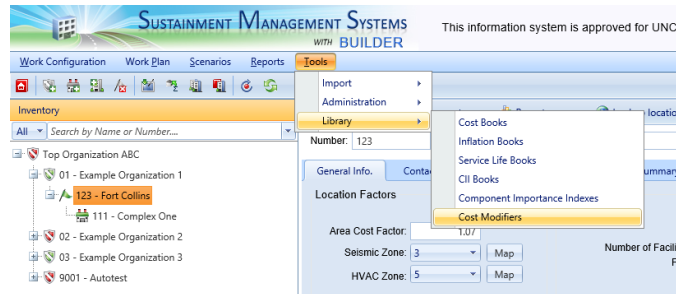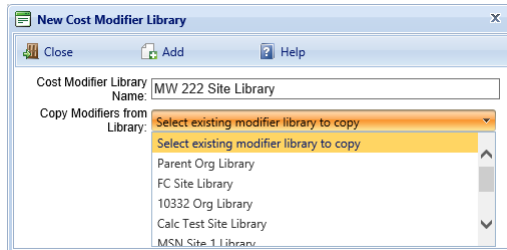

Expand the tree in the left column to show existing cost modifier libraries. If you click on an existing library, the Cost Modifier Library window is displayed:

Adding a Library

Cost modifier libraries can be created for any Organization or Site in the BUILDER hierarchy. In the left column, select the Organization or Site where the library is applicable. Note that the library will only be available at the BUILDER hierarchy level at which it is created as well as any child Organizations or Sites. Click **Add** in the toolbar. The New Cost Modifier Library window is displayed:

Enter the name of the new library. If you want to copy modifiers from an existing library, select it from the drop-down list. If you want to start with an empty library and do not want to copy modifiers from another library, leave the default option selected ("Select existing modifier library to copy"). Click **Add**. The Cost Modifier Library window is displayed with the name of the library at the top. You can now edit the library name, create new cost modifiers to include in the library, or edit existing modifiers.

Editing or Deleting a Library

In the tree in the left column, select the library you want to edit or delete.

To edit a library name: In the Cost Modifier Library window, edit the name in the Library Name field. Click **Save** in the toolbar.

To delete a library: Click **Delete** in the toolbar.

Creating a New Modifier

In the Cost Modifier Library window, click **Create New Cost Modifier**. The New Modifier Item window is displayed:
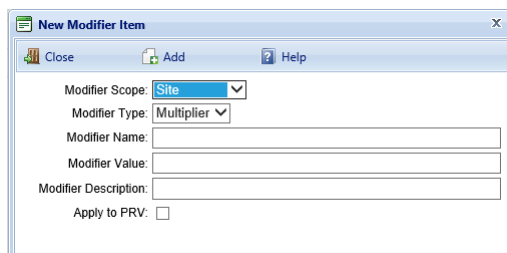
Enter the following information:

- **Modifier Scope**. The level in the BUILDER hierarchy at which the modifier can be assigned. For example, if you select **System**, the modifier can only be assigned to a System.
- **Modifier Type**. The modifier can either be a multiplying factor (Multiplier) or a fixed cost (Adder) that will be applied to all child Sections below the parent level at which the modifier is assigned.
- **Modifier Name**. Any alphanumeric value. For example, "Site Security Multiplier". Single quotes (') are not allowed.
- **Modifier Value**. Must only be a numeric value; decimal values are allowed. Examples of valid Multiplier values: .5, 2, 3.25, 5.02. Examples of valid Adder values: 100, 198.88, 2500.00.
- **Modifier Description**. Optional; any alphanumeric value.
- **Optional Checkbox**. A customized checkbox may also appear, if enabled in BUILDER's Application Settings. In the screenshot above, it is labeled "Apply to PRV." For more information, see Cost Modifier Configuration.

Click **Add**. The new modifier is added to the list of modifiers in the Cost Modifier Library window. Two additional columns are displayed for the modifier:

- **Is Active**. Indicates whether a modifier is active; default is active (checked). If a modifier is changed to inactive (unchecked), any existing cost modifier assignments of this type will remain in place but will not be displayed in the New Modifier Assignment window and **will not be used in calculations**. Also, the modifier will no longer be available for selection in the New Modifier Assignment window. You can use active/inactive to test how different modifiers affect replacement costs without having to unassign and reassign the modifiers each time. For example, if a modifier is assigned to a Building and you want to see what the costs would be without the modifier, you can uncheck "Is Active" in the Cost Modifier Library window. The modifier will no longer appear in the list of modifiers assigned to the Building and will not be included in cost calculations. To once again display the modifier and include it in calculations, return to the Cost Modifier Library window and check "Is Active."
- **Times Assigned**. The number of times the modifier has been assigned.

Editing or Deleting a Modifier

In the Cost Modifier Library window, select the modifier you want to edit or delete.

To edit a modifier: Click the pencil icon to the left of the row. Edit Modifier Name, Modifier Value, Is Active, or Modifier Description. Click the checkmark icon to save your changes.

To delete a modifier: Click the delete (x) icon to the left of the row. A Confirm Action window is displayed. Note that deleting a modifier will also remove all assignments of that modifier in the BUILDER hierarchy. Click OK to confirm the deletion.

Assigning Cost Modifiers

You can create multiple cost modifier libraries and assign separate ones to each Organization or Site in the Inventory mode. See Selecting the Active Library for more information.

Once an active cost modifier library has been selected for an Organization or Site, the modifiers in the library can be assigned to BUILDER inventory. See Assigning Cost Modifiers for more information.

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