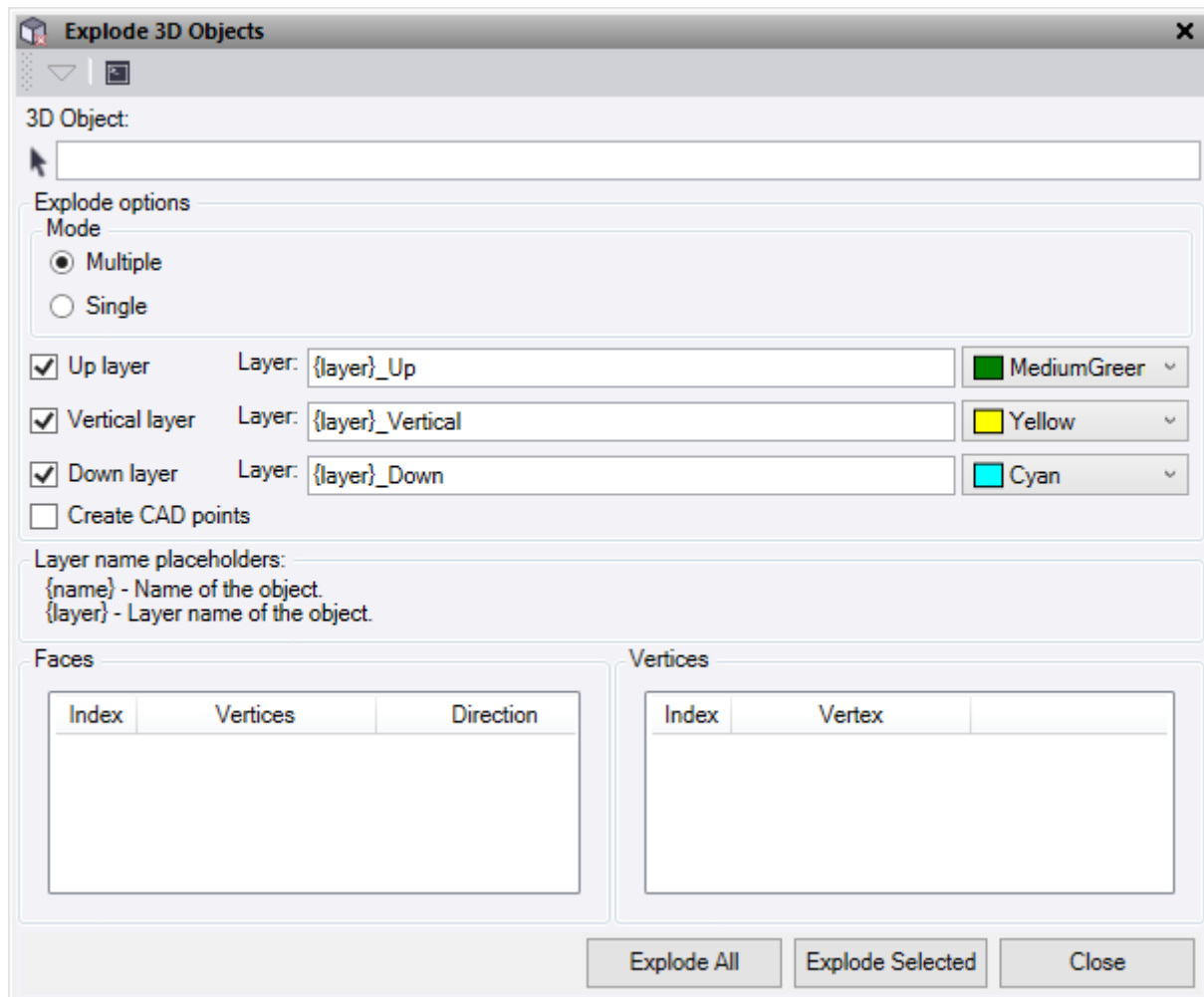Explode 3D Objects

Command Description

The Explode 3D Objects command enables the user to select 3D solid objects and explode them into component lines and points. The command can break them into top, bottom, and vertical side objects on separate layers so that the data can be used as source data for surface models.

1. Click in the **3D Objects** selection field and then in a graphic view select one or multiple BIM objects.

2. Explode Options:

   Mode: **Multiple**

   - **Up Layer** – Check this box to create linework for the top surface from the object. Enter a layer name for the lines to be placed, which can use the placeholders shown and then a suffix. The default used is *{layer}_Up*. Select a colour for the linework.

   - **Vertical Layer** – Check this box to create linework for the vertical surface from the object. Enter a layer name for the lines to be placed, which can use the placeholders shown and then a suffix. The default used is *{layer}_Vertical*. Select a colour for the linework.

- **Down Layer** – Check this box to create linework for the down surface from the object. Enter a layer name for the lines to be placed, which can use the placeholders shown and then a suffix. The default used is *{layer}_Down*. Select a colour for the linework.

Mode: **Single**

- **Layer** –Creates linework for the whole selected object in one layer. Enter a layer name for the lines to be placed, which can use the placeholders shown and then a suffix. The default used is *{layer}_Exploded*. Select a colour for the linework.

- **Create CAD Points** – Check this box to create CAD points at the ends of all exploded lines for each layer above selected. These points are not connected to the lines.

3. **Layer name placeholders**:

   - {name} – This will use the name of the object selected.

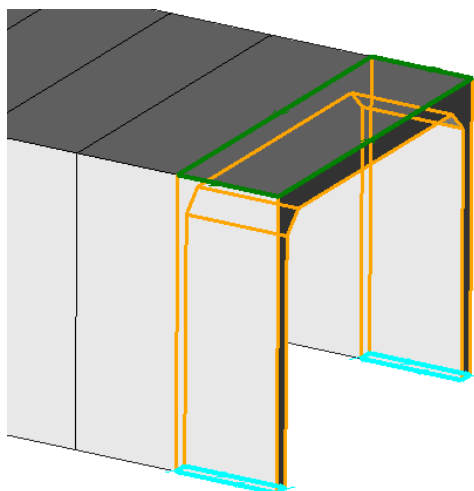   - {layer} – This will use the layer name of the object selected.

4. The **Faces** and **Vertices** of the 3D objects selected are listed in the table. This only happens when a single object is selected as it is disabled if multiple objects are chosen.

   - These are selectable in the table and can be used to select just the face or vertices for inspection. Any **faces** selected can be exploded using the **Explode Selected** button to get only those lines and points. These will be placed on the appropriate layers depending on what you have set.

5. Do either of the following:

   - Click **Explode All** to explode the whole object using the set explode options chosen.

   - Click **Explode Selected** to explode only the selected faces highlighted in the list.

   - Click **Close** when finished with the command.

Example: