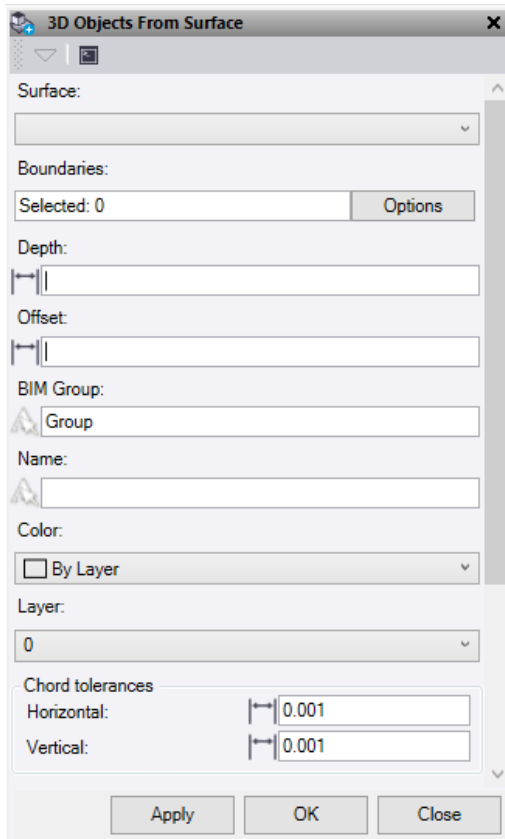# 3D Object From Surface

Command Description

The 3D Object From Surface command enables you to select a surface and apply a depth and/or surface offset against it. No boundary is required, however one or many closed boundary strings can also be applied to create a 3d solid object.

1. Click in the **Surface** selection field and select the surface.

2. Optionally select one or more closed linestrings to be used as boundaries. Click **Options** button for additional selection options.

3. Enter a **"Depth"** to apply a value from the surface to create the solid. A positive number applies in a downward direction and a negative number will be applied in an upward direction.

4. A vertical **Offset** can be applied to the original surface. A positive number applies in an upward direction and a negative number applies in a downward direction.

5. Enter a **BIM Group** name for the new object. This will be saved in the project explorer under the **BIM Data**.

6. Enter a **Name** for the new 3d object.

7. Select a **Colour** for the new 3d object.

8. Select or create a **Layer** for the new 3d object.

9. The **Chord tolerances** are applied when using linestrings that contain curves.

   ▪ **Horizontal** – This applies to horizontal curves.

   ▪ **Vertical** – This applies to vertical curves.

10. Do either of the following:

- Click **Apply** to create the 3d solid and keep the **3D Objects From Surface** command pane open.

- Click **OK** to create the 3d solid and close the **3D Objects From Surface** command pane.

Tips: Sometimes the 3d object created is not formed correctly from the surface. This can often be fixed by one of the following methods.

- *If using an imported surface, try recreating the surface in TBC using the original surface as the member.*
- *Use a boundary string with the surface.*
- *If using a boundary, use the Line Node Clean-up tool to make sure the boundary string is clean.*

Example: *3d pavements*