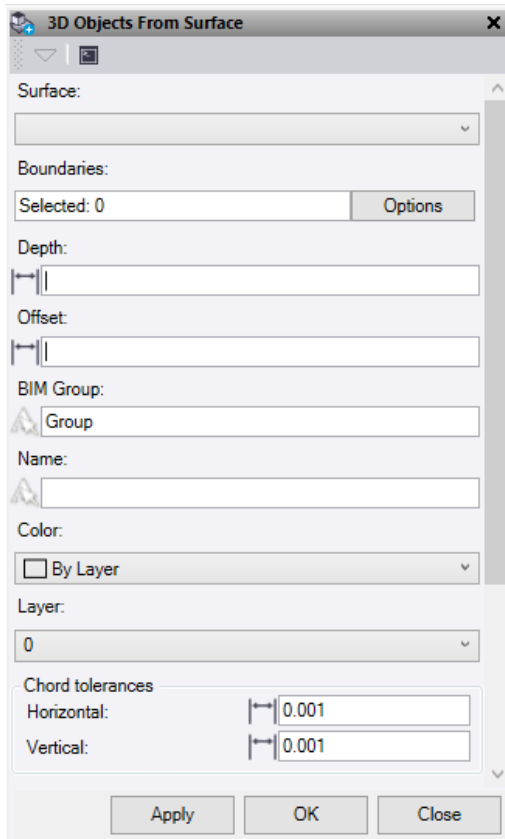




3D Object From Surface

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.



The screenshot shows the '3D Objects From Surface' dialog box with the following fields and controls:

- Surface:** A dropdown menu for selecting a surface.
- Boundaries:** A text field showing 'Selected: 0' and an 'Options' button.
- Depth:** A text input field with a double-headed arrow icon on the left.
- Offset:** A text input field with a double-headed arrow icon on the left.
- BIM Group:** A text input field with a dropdown arrow on the left, currently showing 'Group'.
- Name:** A text input field with a dropdown arrow on the left.
- Color:** A dropdown menu with a checkbox labeled 'By Layer' and a dropdown arrow.
- Layer:** A dropdown menu currently showing '0'.
- Chord tolerances:** Two text input fields: 'Horizontal' with a value of '0.001' and 'Vertical' with a value of '0.001', each with a double-headed arrow icon on the left.

At the bottom of the dialog are three buttons: 'Apply', 'OK', and 'Close'.

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

