AIM Backwards Facing Step - Mesh

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Mesh

Close the Model Editor, then initiate the meshing process by clicking on **Mesh** in the workflow.

Set Mesh Size & Controls

Under **Global Sizing**, change the **size function method** to **Proximity**. In the **Boundary Layer Settings**, under **Collision avoidance**, choose the **Layer compression** option.

The boundary layer locations will need to be specified. Click **Boundary Layer** under **Mesh Controls** in the **Objects** section of the **Mesh** template. Use the face selection tool and select the 3 faces on the bottom of the flow volume as shown below.

It can be anticipated that a high mesh resolution will be necessary in the areas surrounding the step. In order to achieve this, use a **Body Sizing** control. **Body Sizing** can be found in the **Add** drop down menu next to **Size Controls**. Create a **Body Sizing** by selecting the solid and using an **Element size** of 0.02m.

Generate Mesh

Click **Generate Mesh** under **Output** or at the top of the screen by the status window for **Mesh**, AIM should detect that you are ready to generate the mesh and highlight the buttons in blue. Below is an example of the mesh that is generated.

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