

# ANSYS 12 - LaminatePlate - Geometry



This Tutorial is Under Construction!

Author: John Singleton, Cornell University

[Problem Specification](#)

[1. Pre-Analysis & Start-Up](#)

[2. Geometry](#)

[3. Mesh](#)

[4. Setup \(Physics\)](#)

[5. Solution](#)

[6. Results](#)

[7. Verification & Validation](#)

## 2. Geometry

### Launch Design Modeler

In order to start the Design Modeler **(Double Click) Geometry**. After the Design Modeler opens, select meter as the desired length unit.

### Proper Orientation

The sketching will be done in the XY plane, so **(Click) XY Plane**, then click on the face plane button, .


### Line Sketching

The laminate plate will be modeled using shell elements, thus the geometry needed will simply be a square in the XY Plane. In order to draw the rectangle **(Click) Sketching > (Click) Rectangle** then draw a rectangle in the XY Plane.

### Dimensioning

Dimension the rectangle such that both sides are defined to be 10m.

### Surface Creation

Here, the rectangle will be turned into a surface. To do so **(Click) Concept > Surface From Sketches**. Next, highlight all four edges of the rectangle and select **Apply** in the "Details of SurfaceSK1" table. Now, click the generate button,  **Generate**, in order to create the surface.

[Go to Step 3: Mesh](#)

[See and rate the complete Learning Module](#)

[Go to all ANSYS Learning Modules](#)