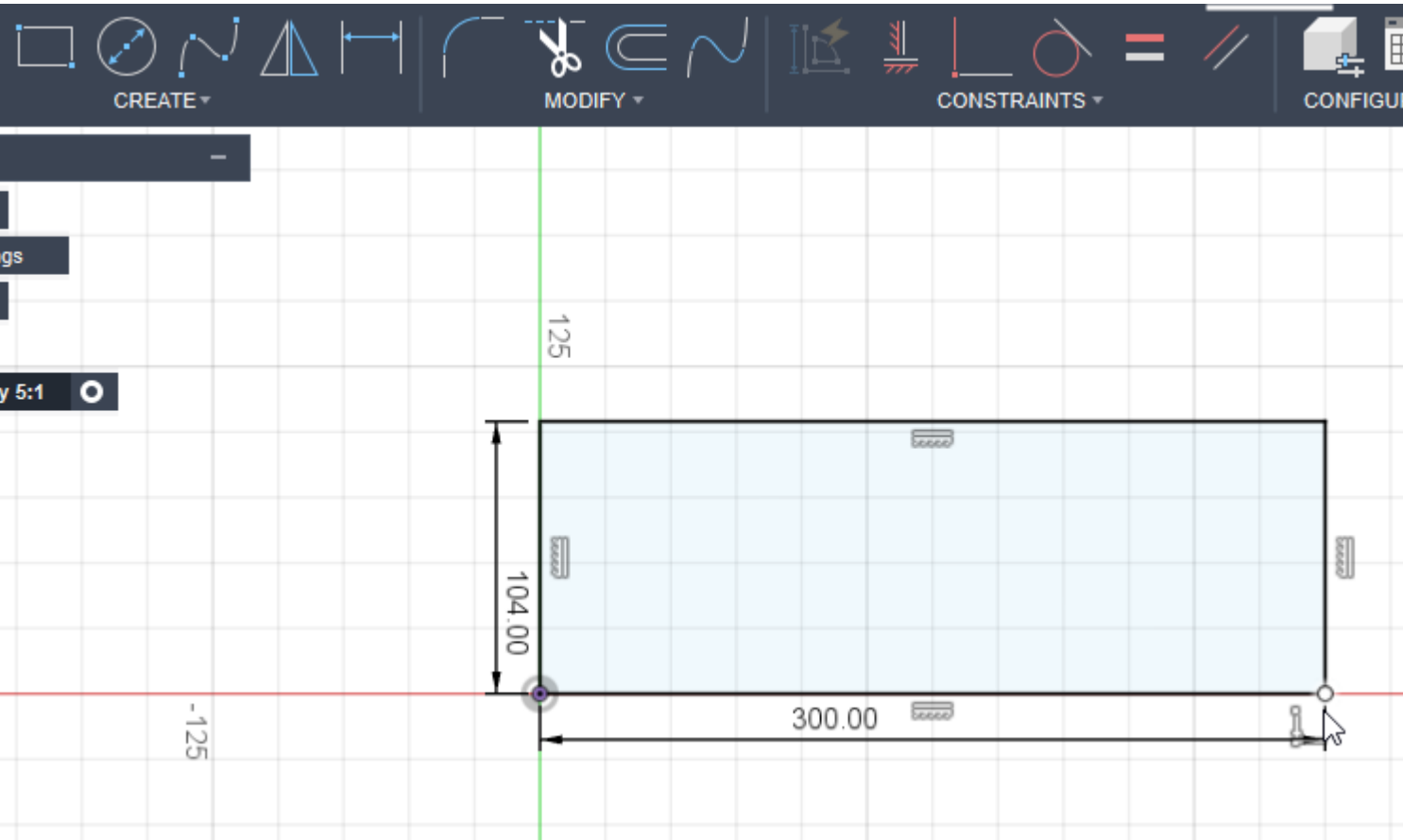


Ice Tray Modeling

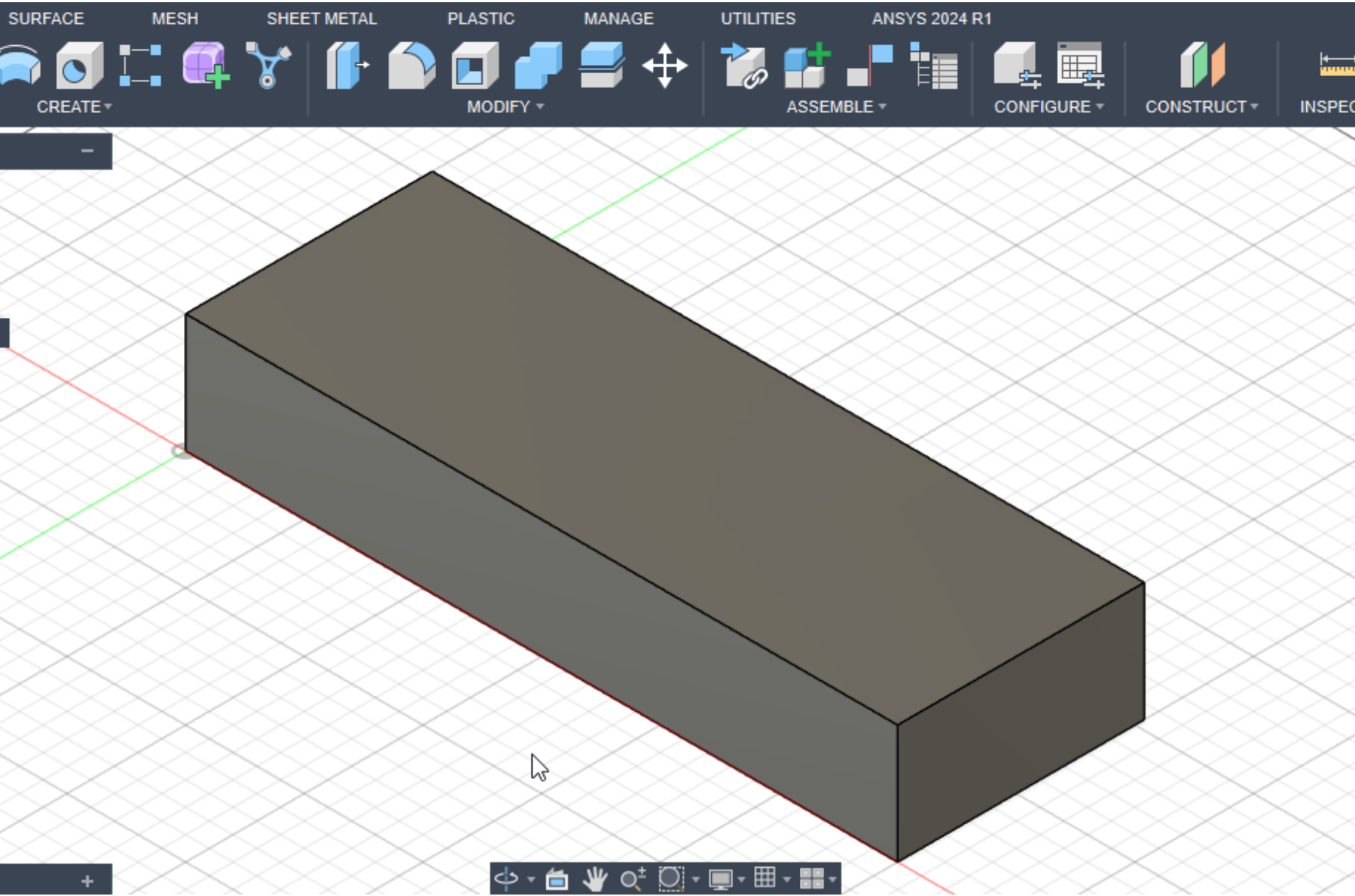
1. Create Base Block



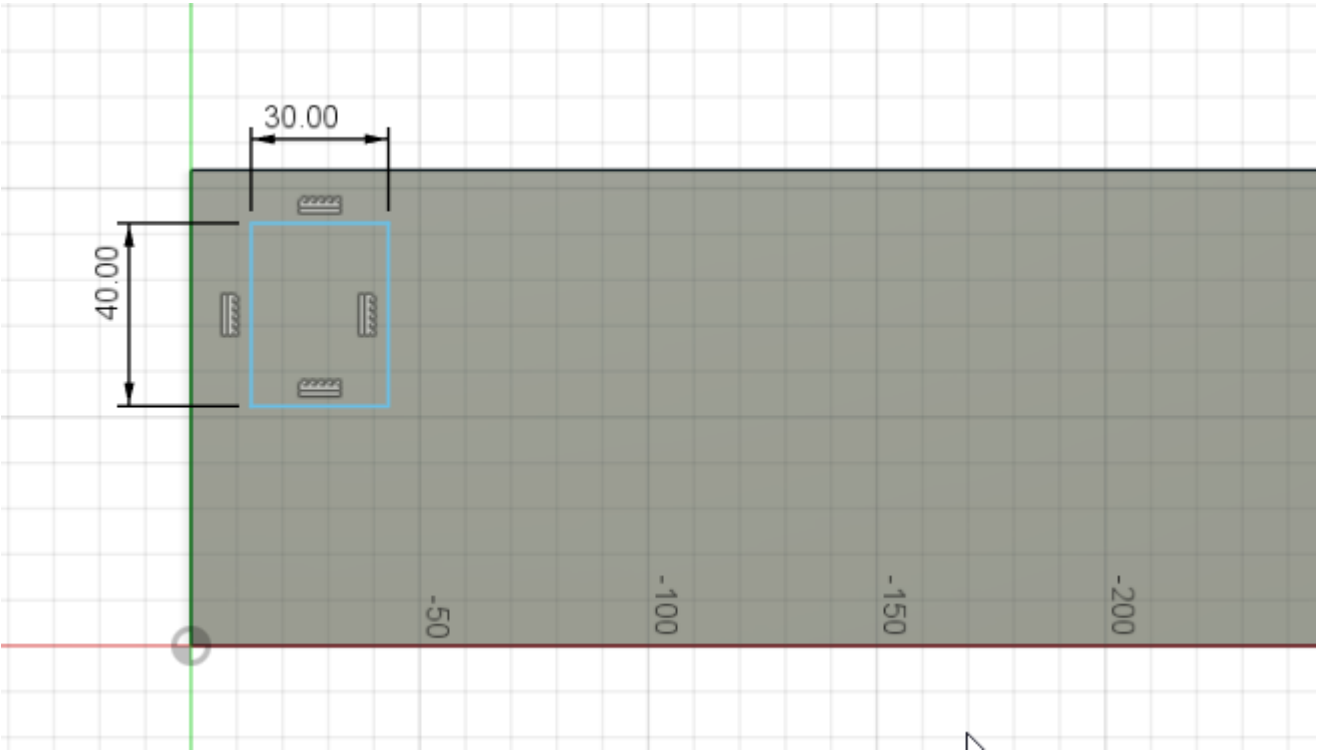
Draw a rectangle on the top plane using the dimensions shown in your image.

Extrude the base using **E**
Height = 50 mm

2. Sketch Ice Cube Pocket



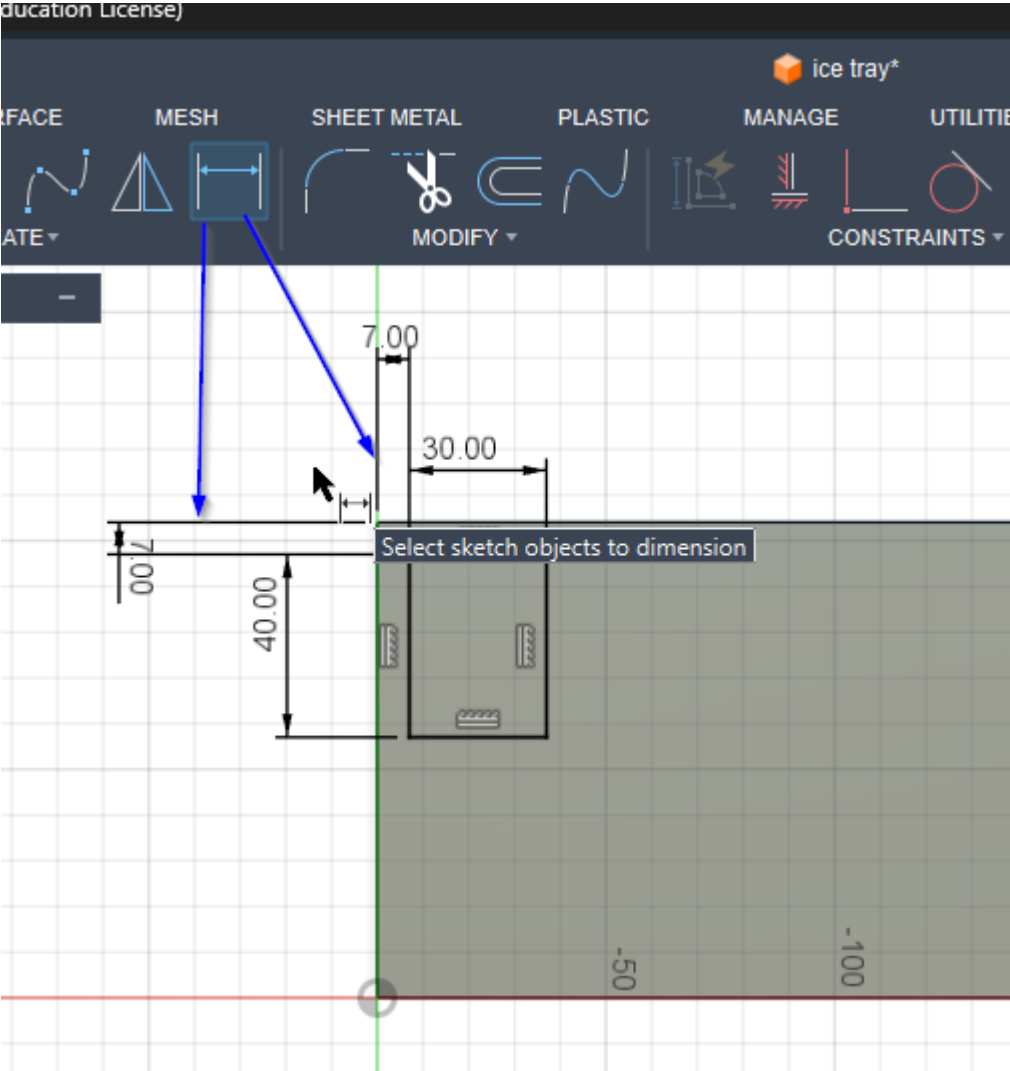
Create a rectangle sketch **on the top surface**.



Use **Sketch Dimension** to position the pocket:

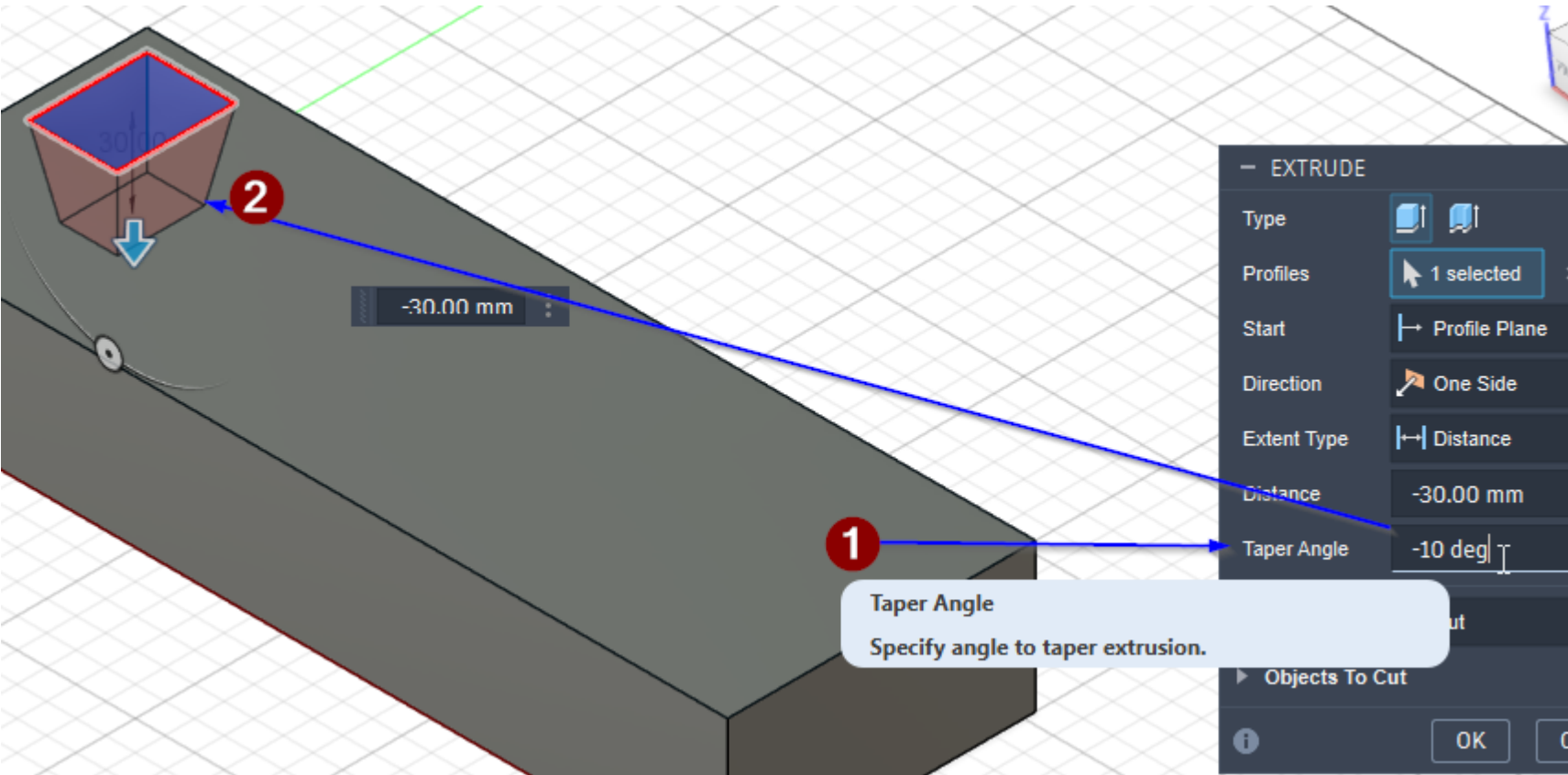
- **7 mm** offset from both sides.

3. Cut the Pocket



Extrude this rectangle **downwards** until depth reaches **30 mm** into the body.

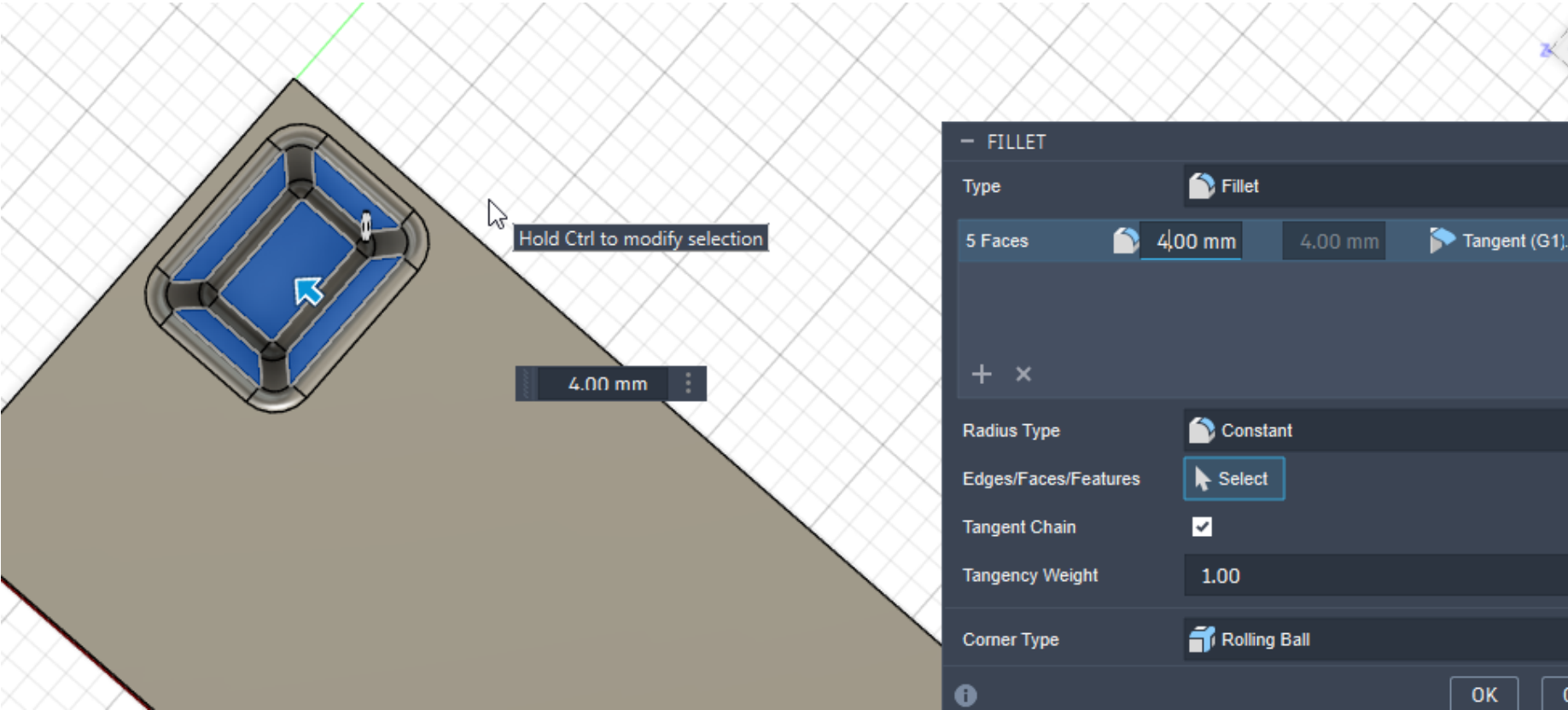
4. Add Draft (Taper) for Easy Demolding



Set **Taper Angle** = **-10°**

This ensures the ice cubes fall out easily.

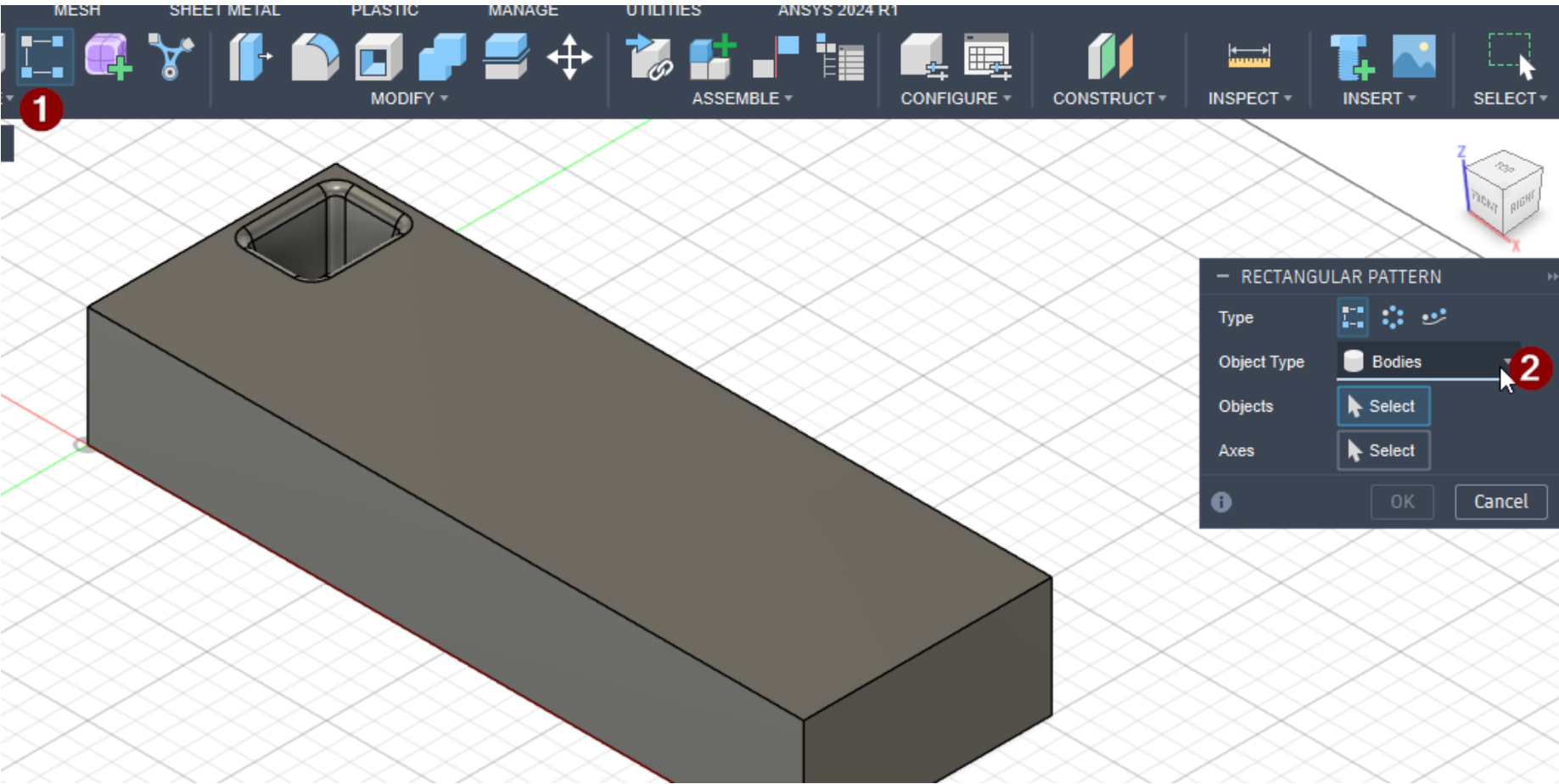
5. Fillet Inner Edges



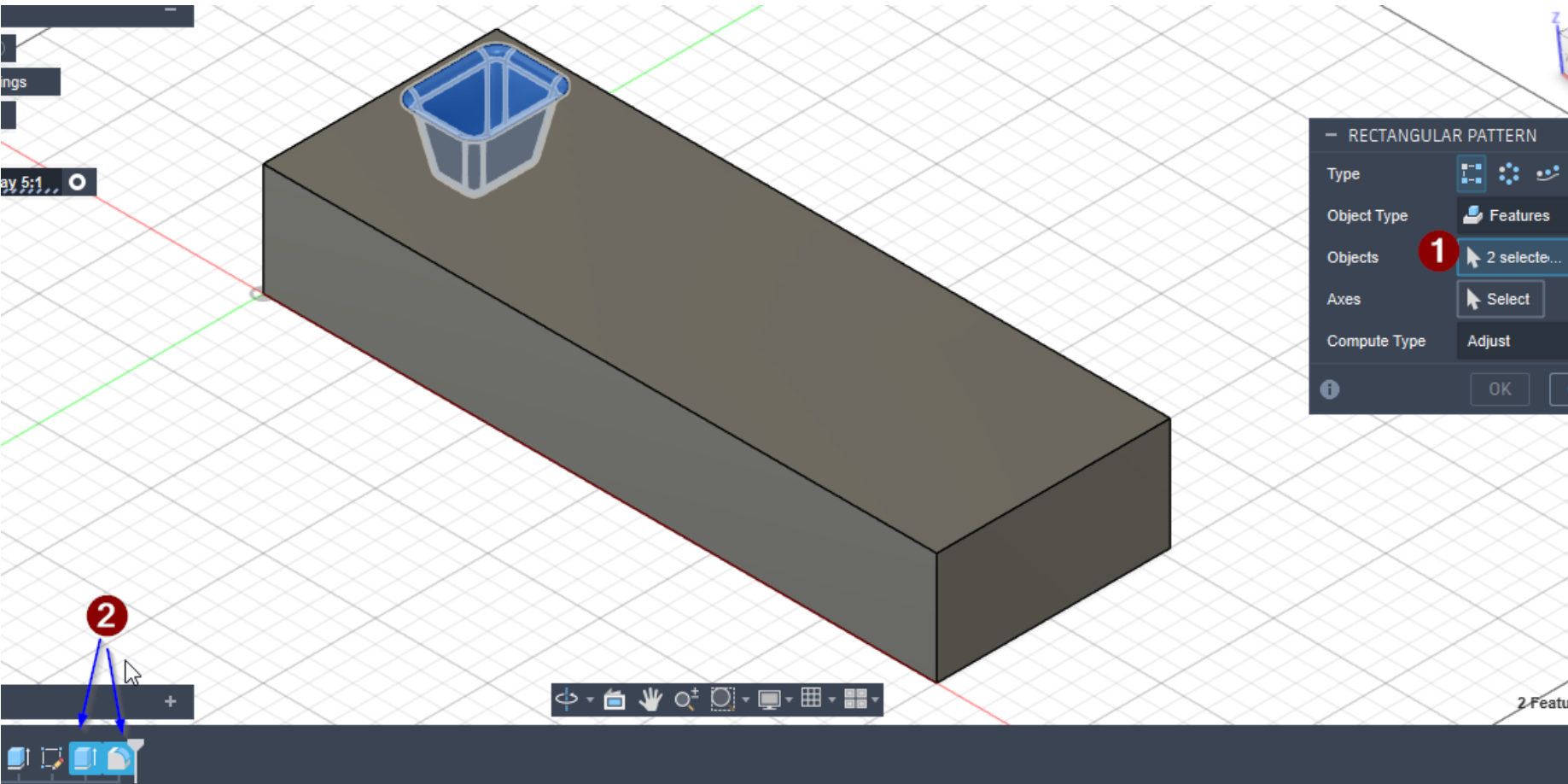
Select all internal edges and apply:

- **Fillet** = **4 mm**

6. Prepare for Pattern



1. Go to **Create** → **Pattern** → **Rectangular Pattern**
2. Change **Object Type** = **Features**

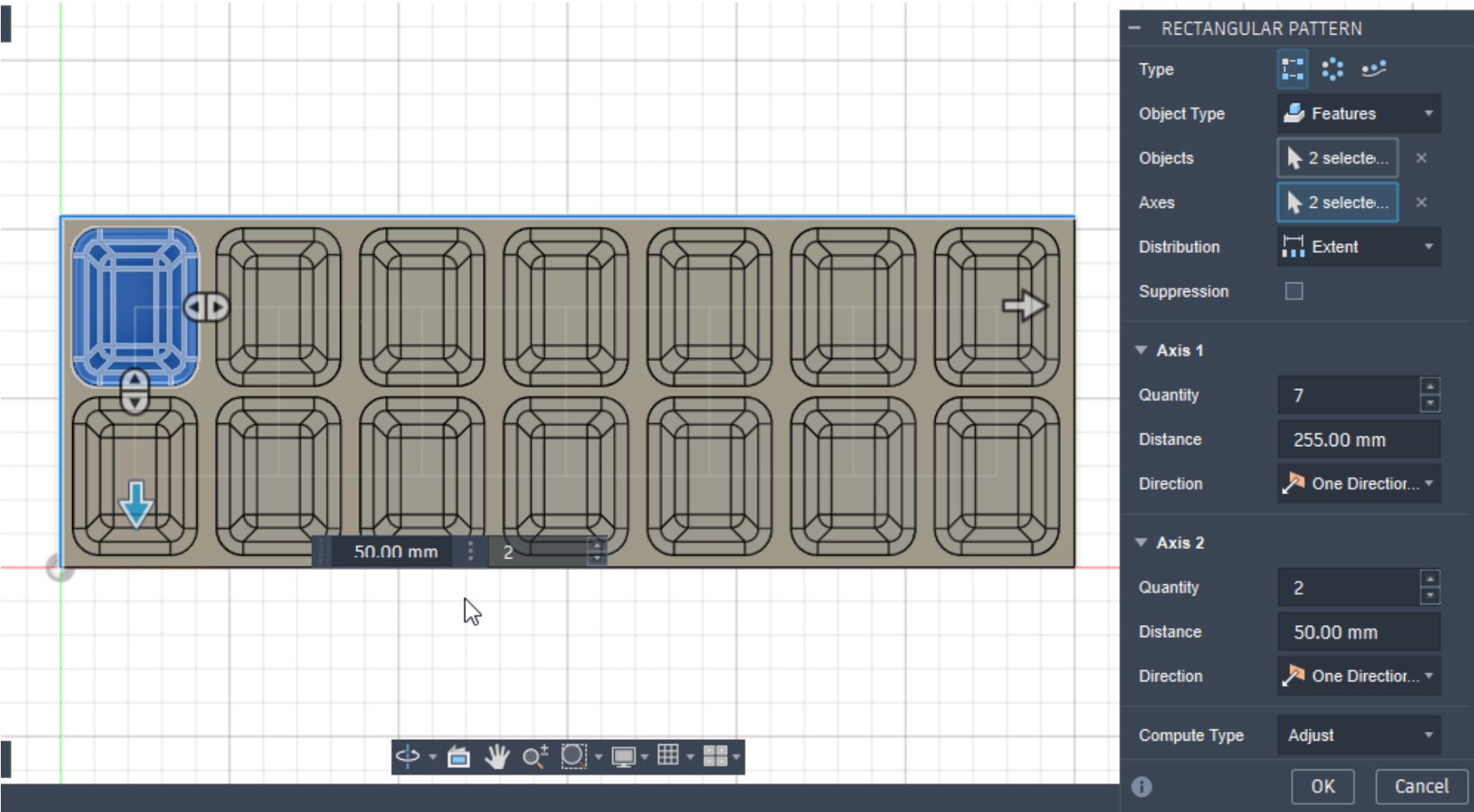


Select these two features:

- The **cut/extrude**
- The **inner fillet**

These will repeat across the tray.

7. Apply Pattern

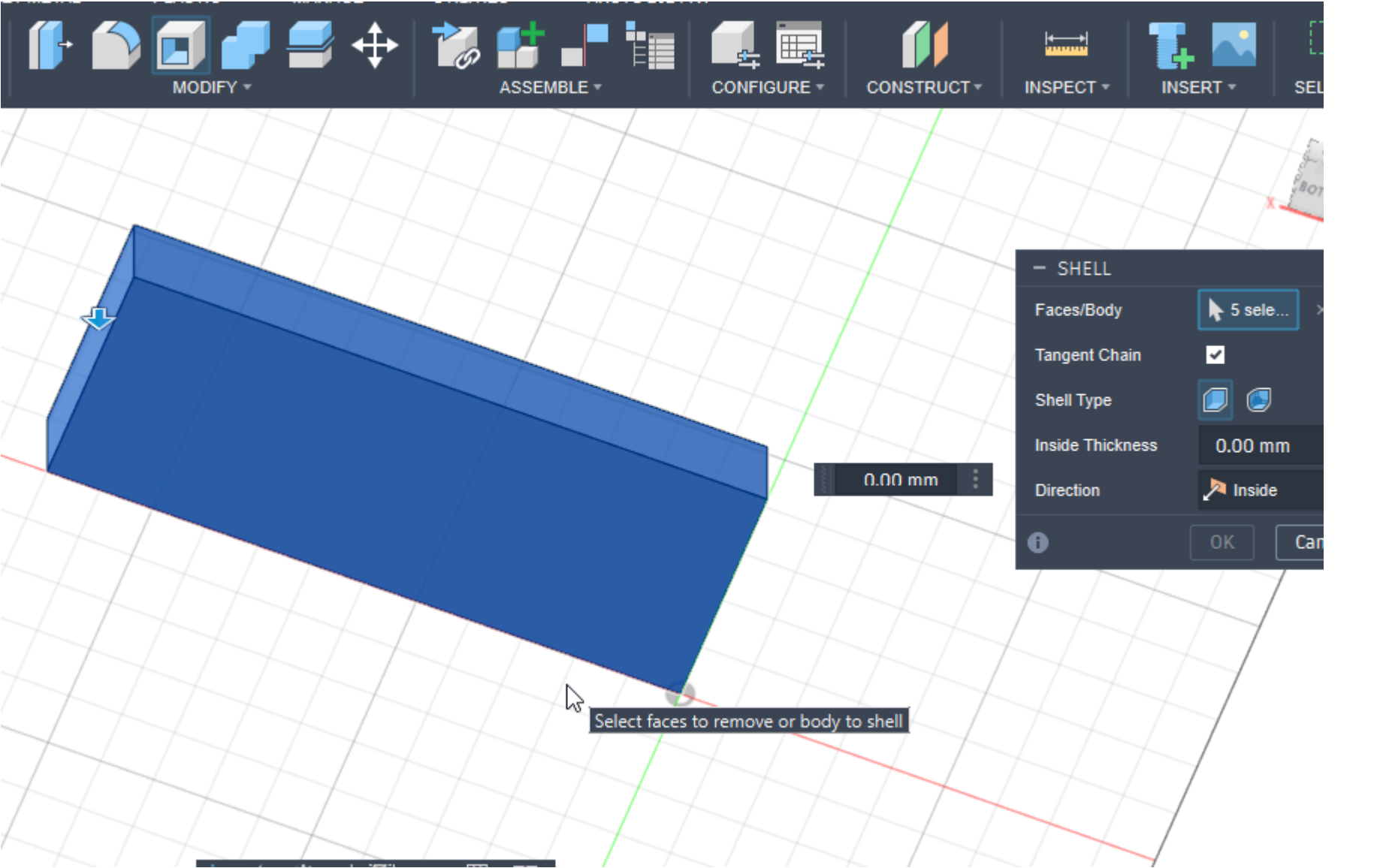


Adjust:

- Direction 1 count & spacing
- Direction 2 count & spacing

Click OK to create full array of cubes.

8. Shell the Tray

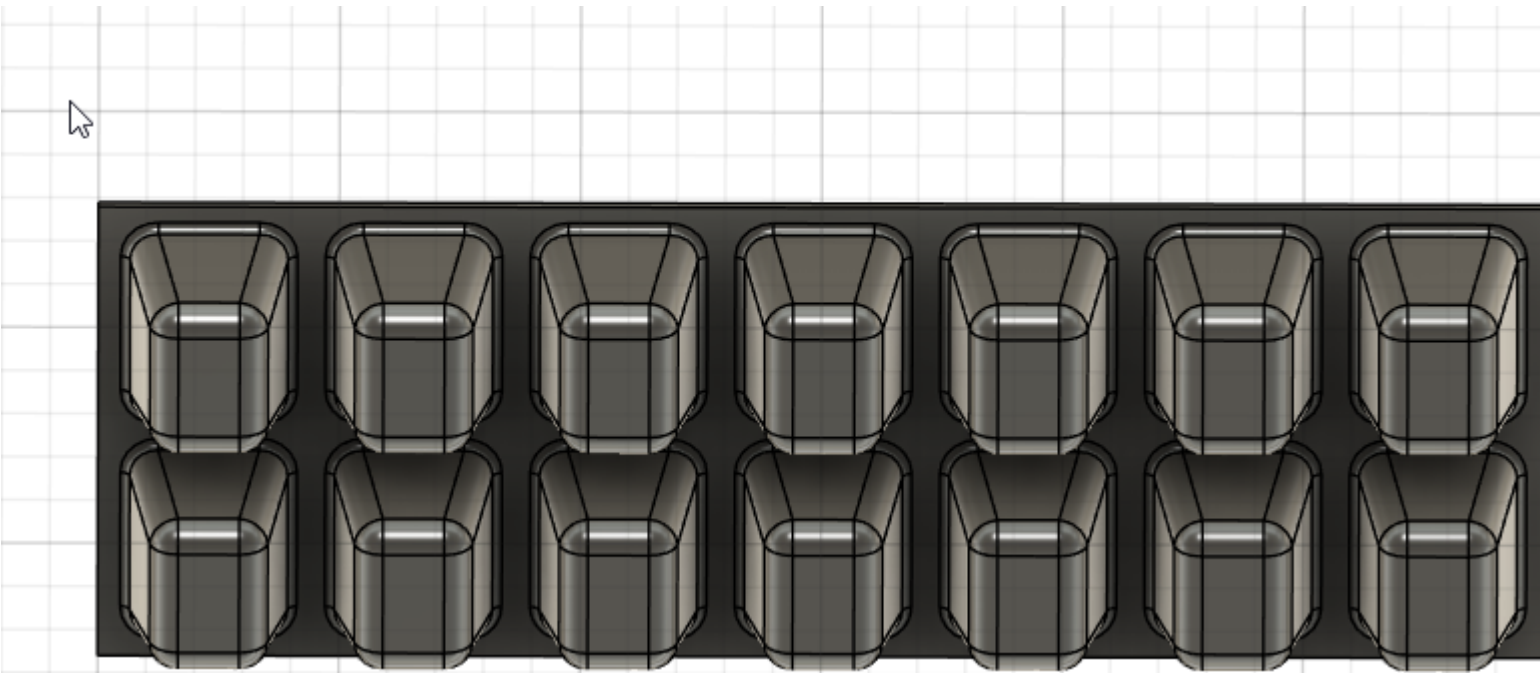


Select all side walls and bottom:

- Shell thickness = 2 mm

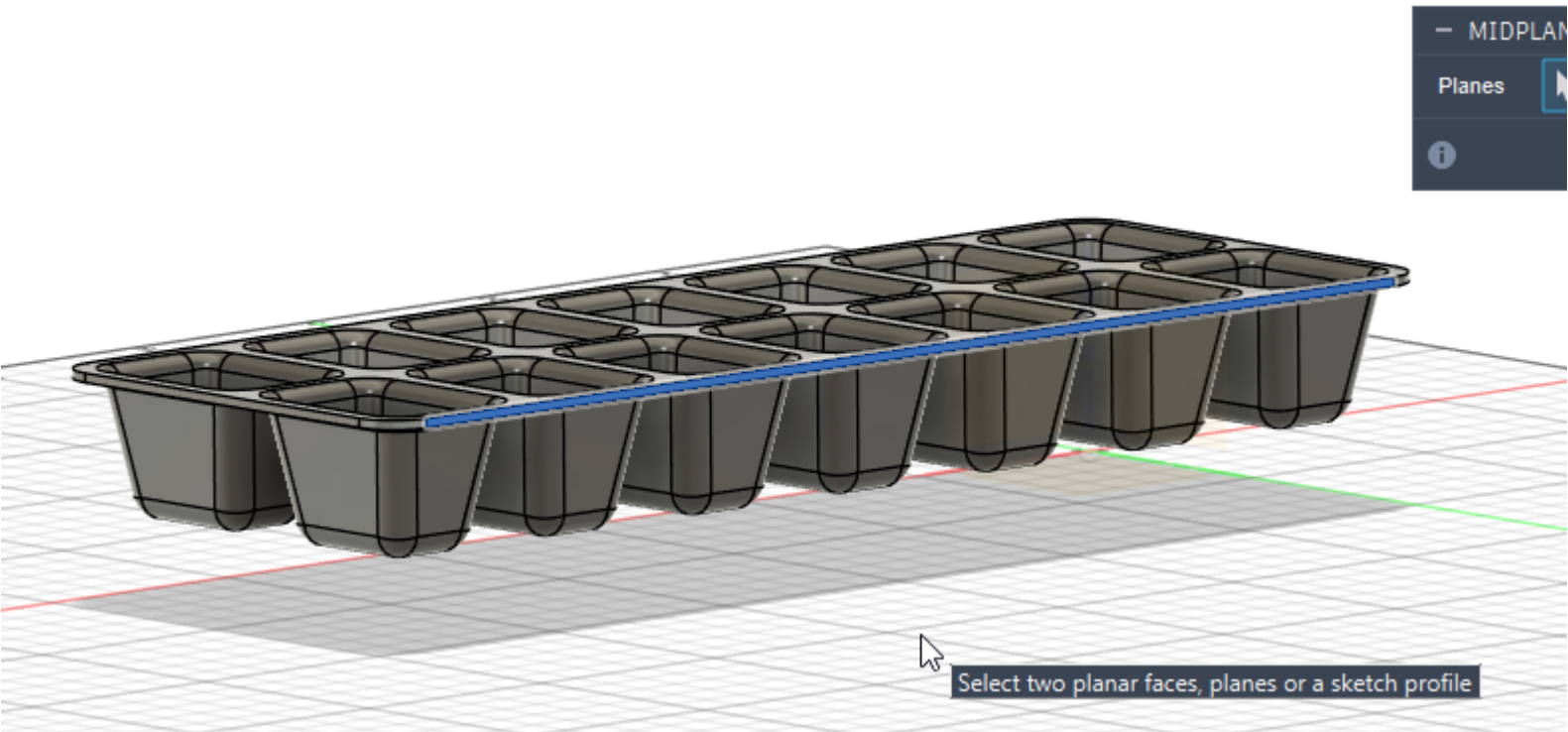
This leaves only 2 mm wall thickness for the tray.

9. Add Outer Fillet



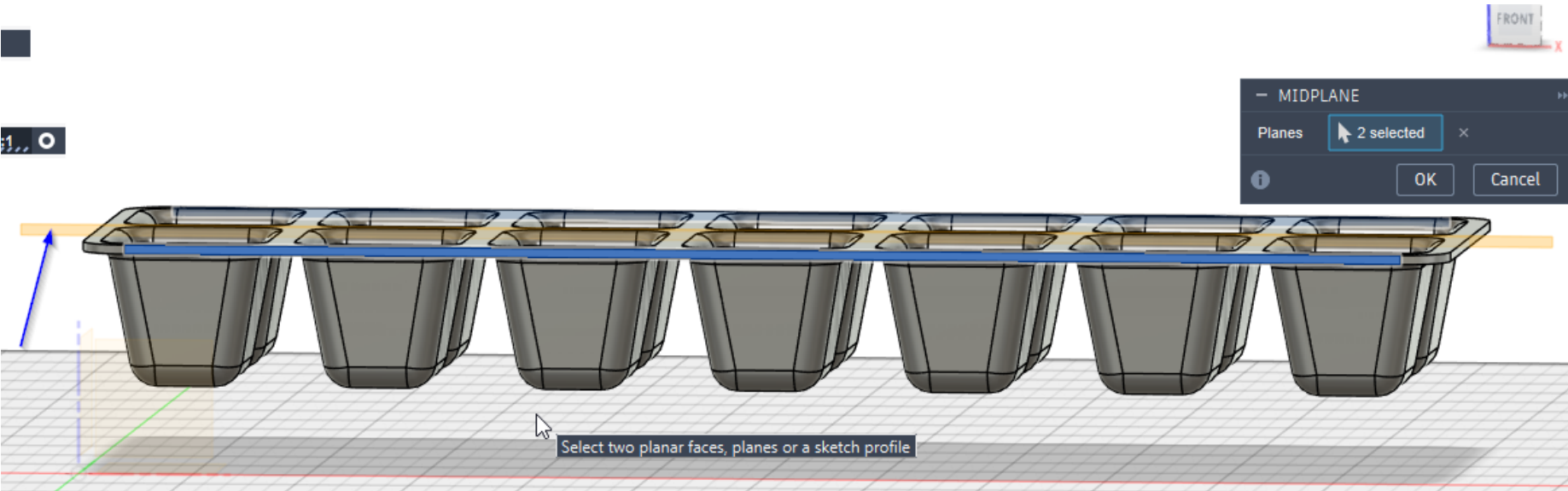
Apply a **10 mm fillet** to soften the entire outer boundary.

10. Create Midplane for Sweep Rail



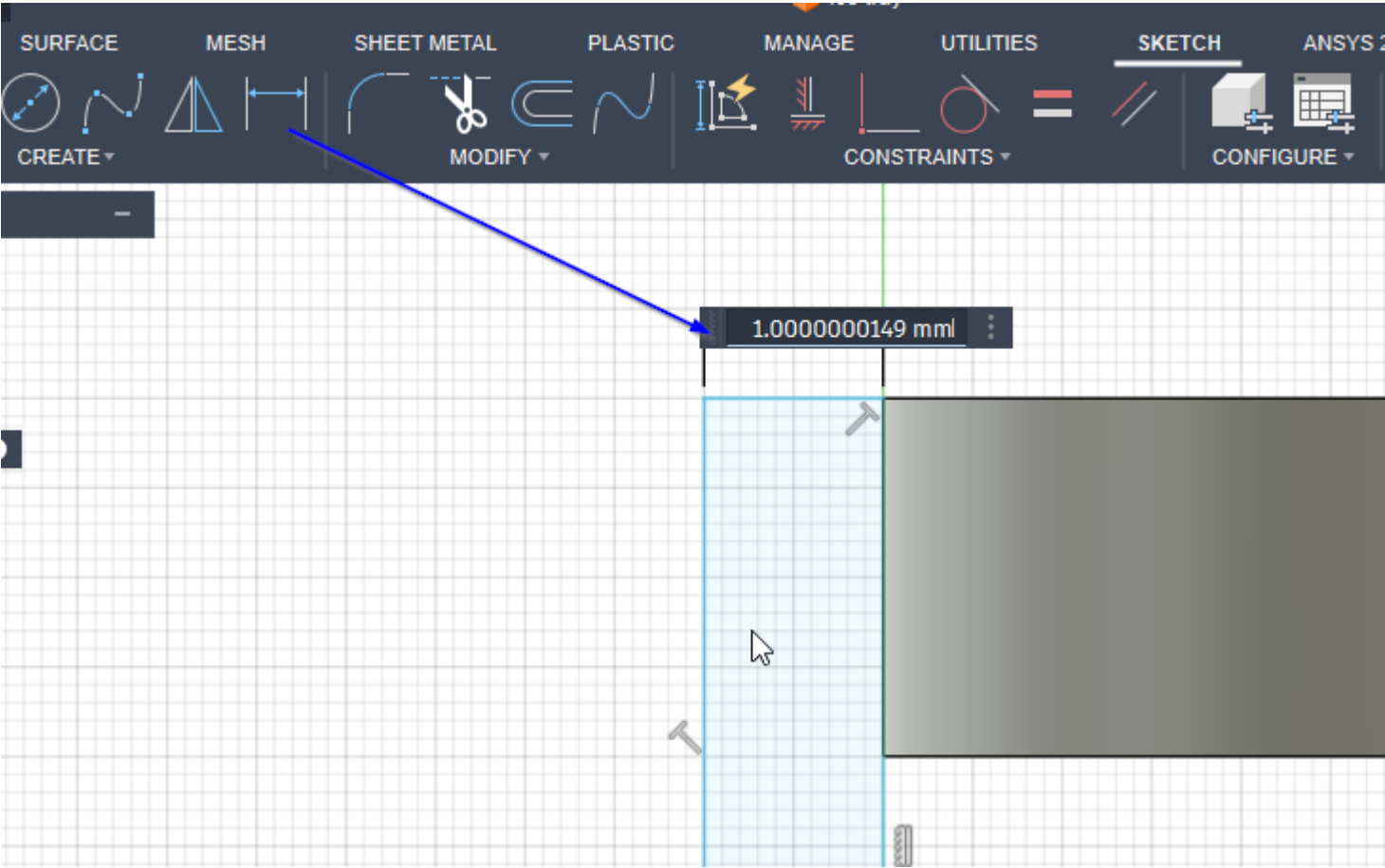
Select opposite faces:

- 1. Select left face
- 2. Select right face
- Fusion creates a **mid-plane**



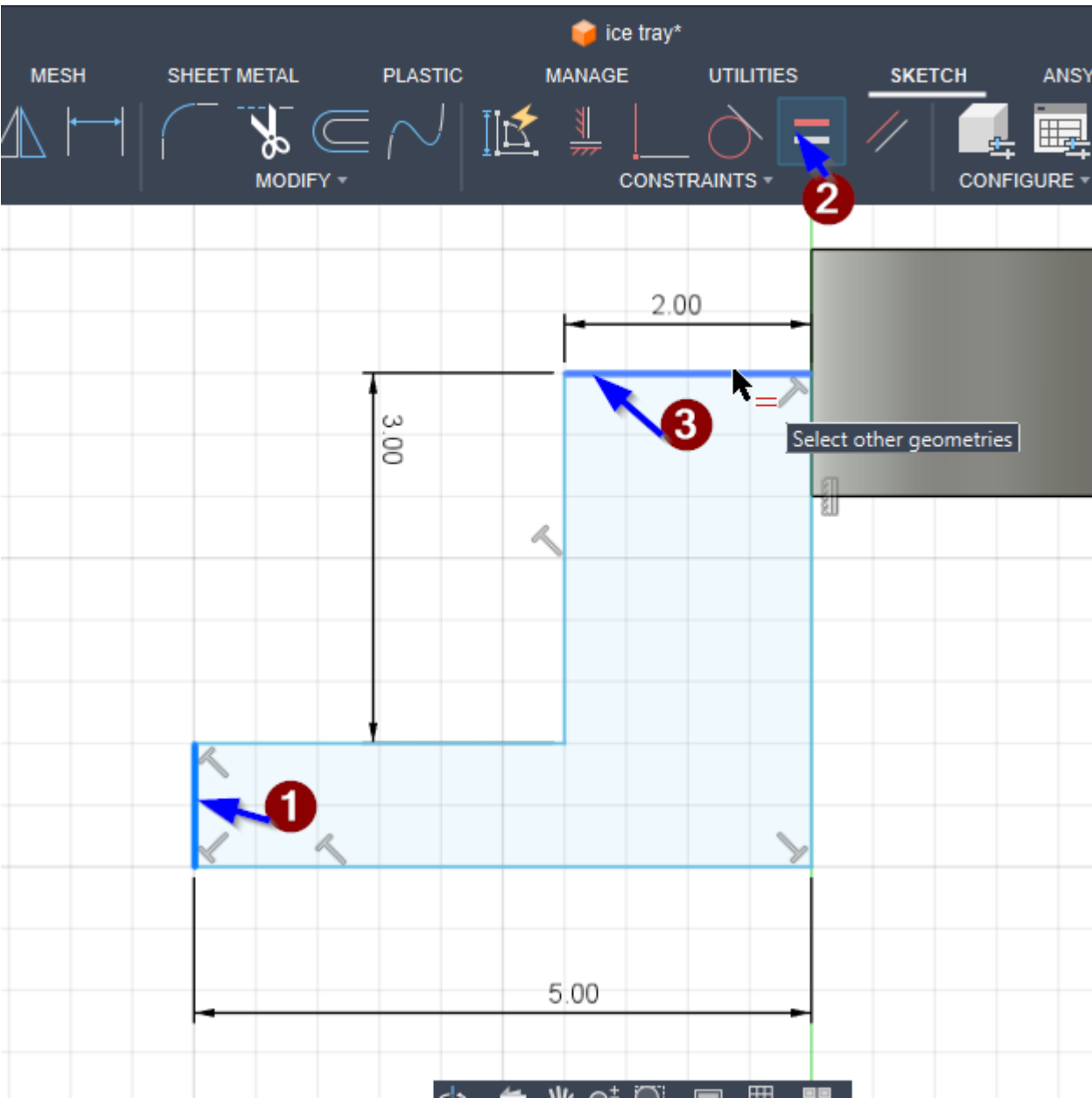
Right-click plane → **Create Sketch**

11. Sketch the L-Shaped Profile



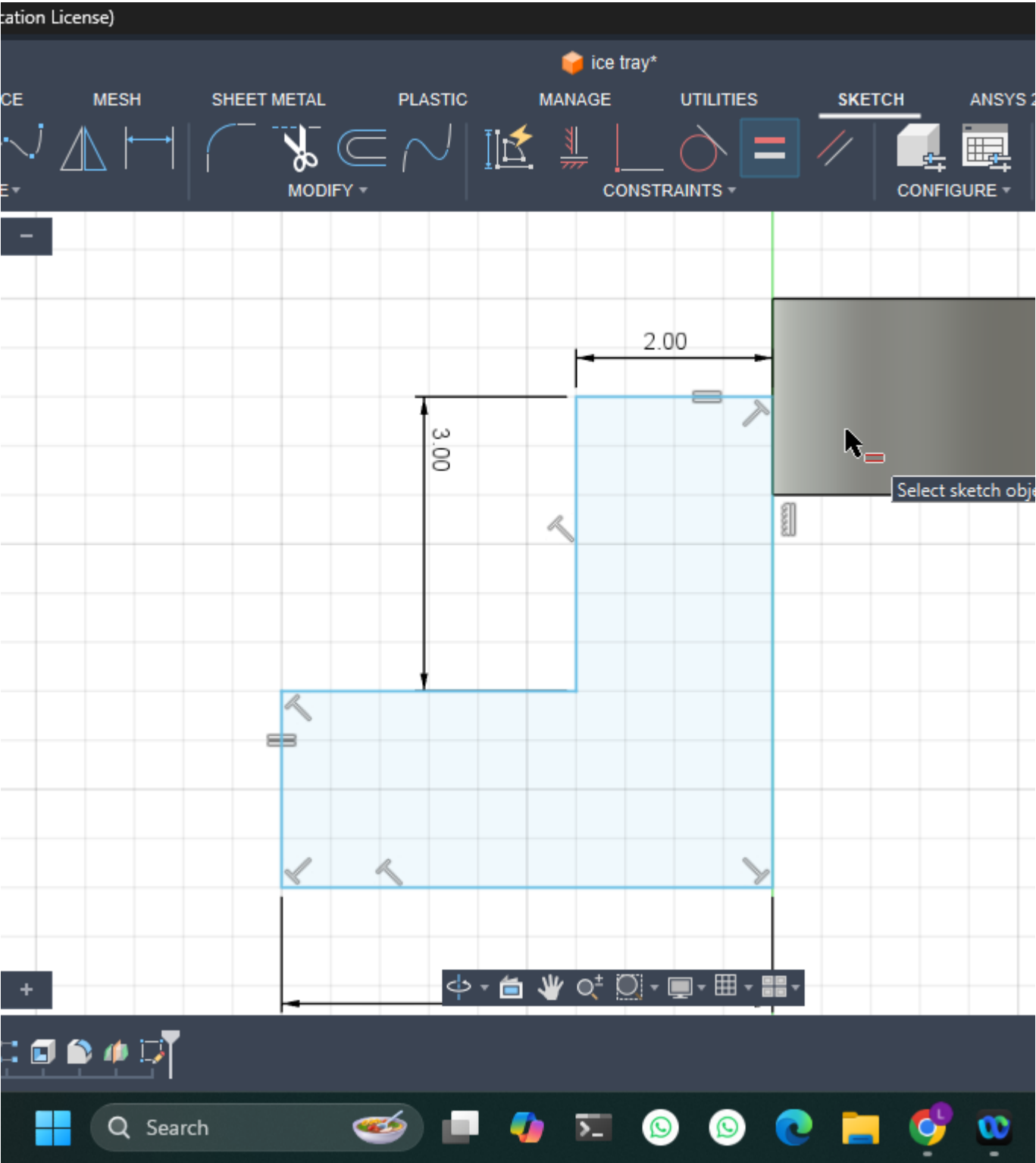
Draw an **L shape** on the mid-plane.

Use **Dimension** and **Constraints** to set exact sizes.



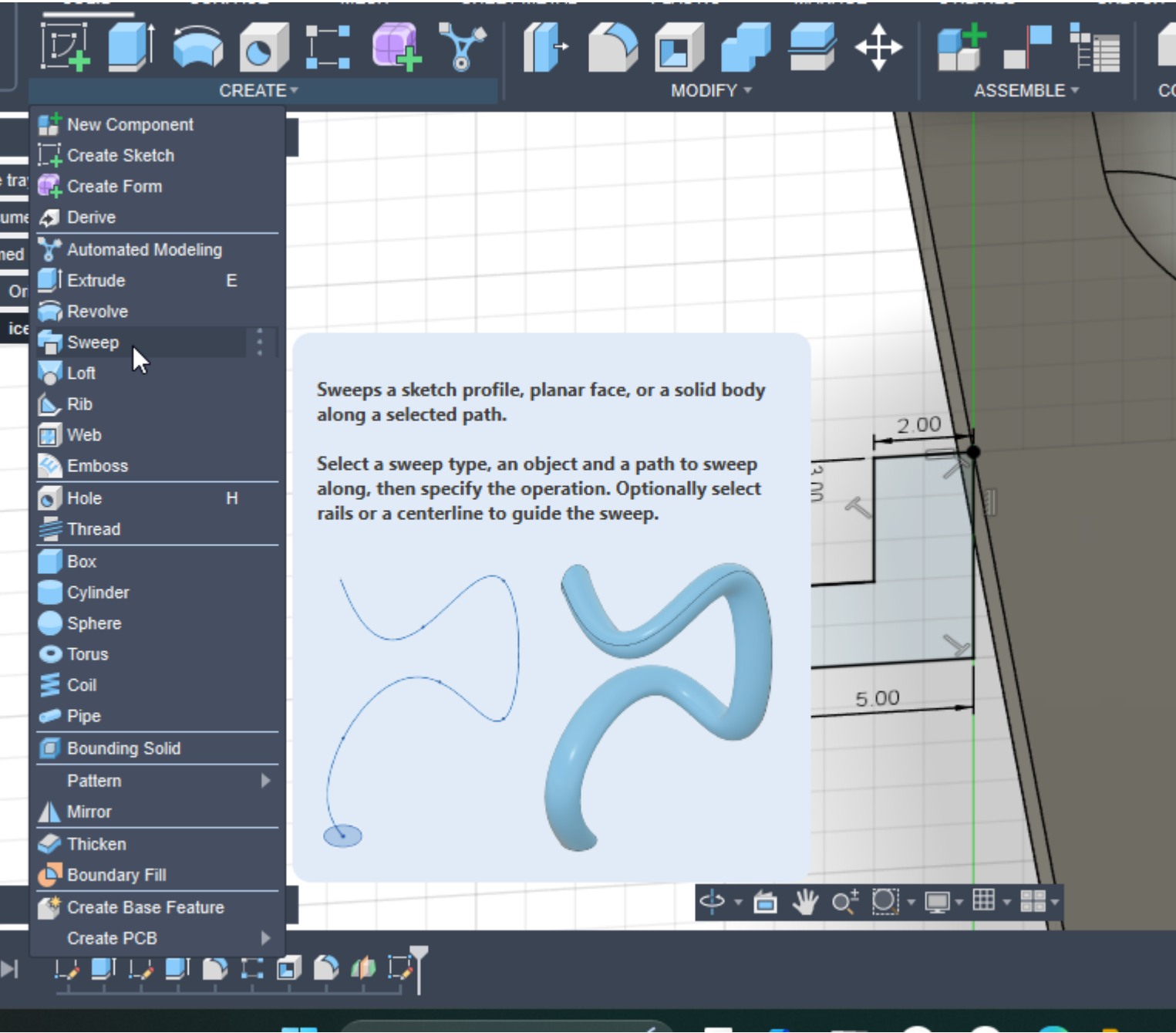
- Use **Equal**, **Coincident**, and **Horizontal/Vertical** constraints.
- Make sure the profile is fully constrained.

12. Join the Three Points



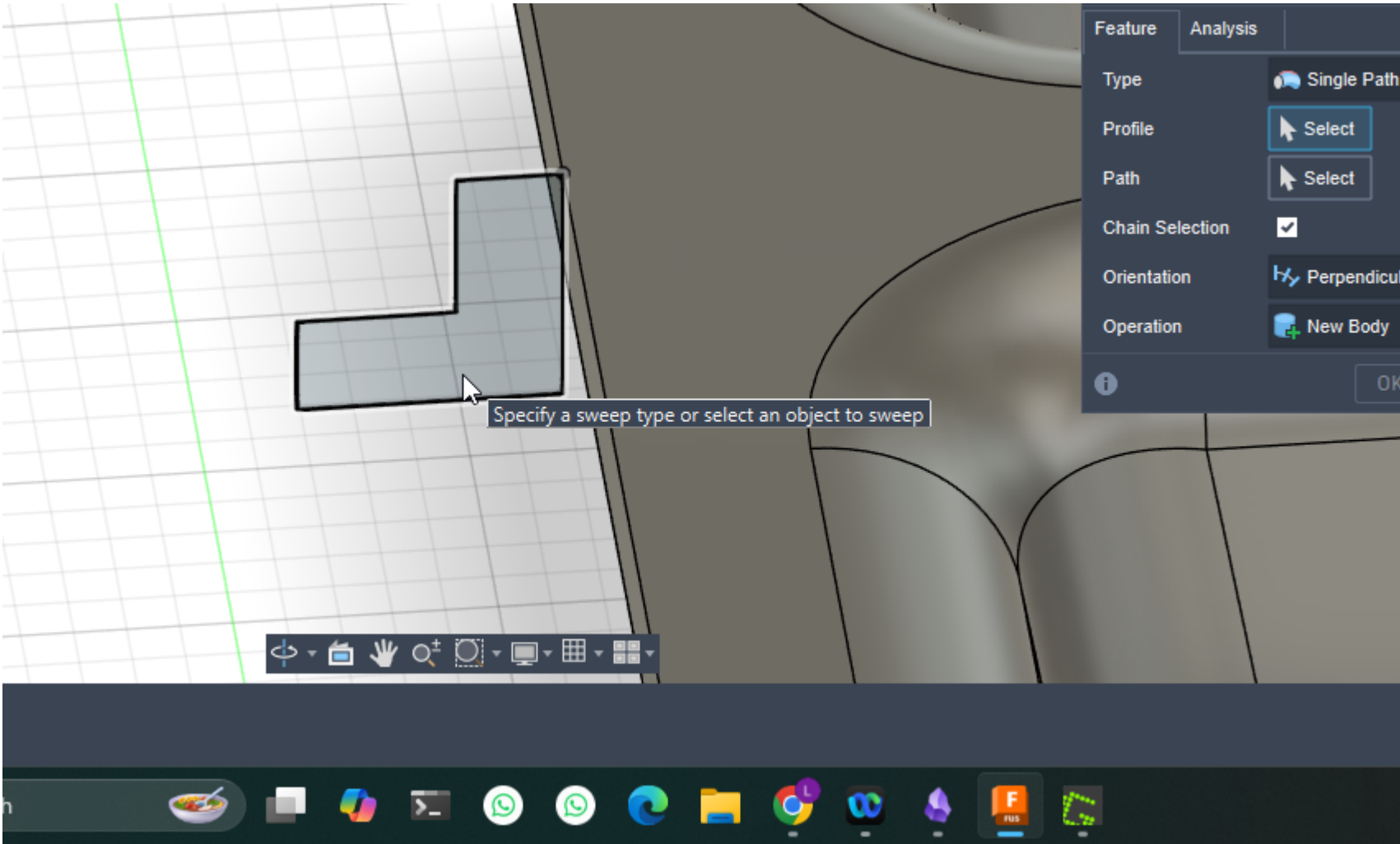
Apply **Coincident** so all edges meet cleanly.

13. Sweep the Tray Edge Design

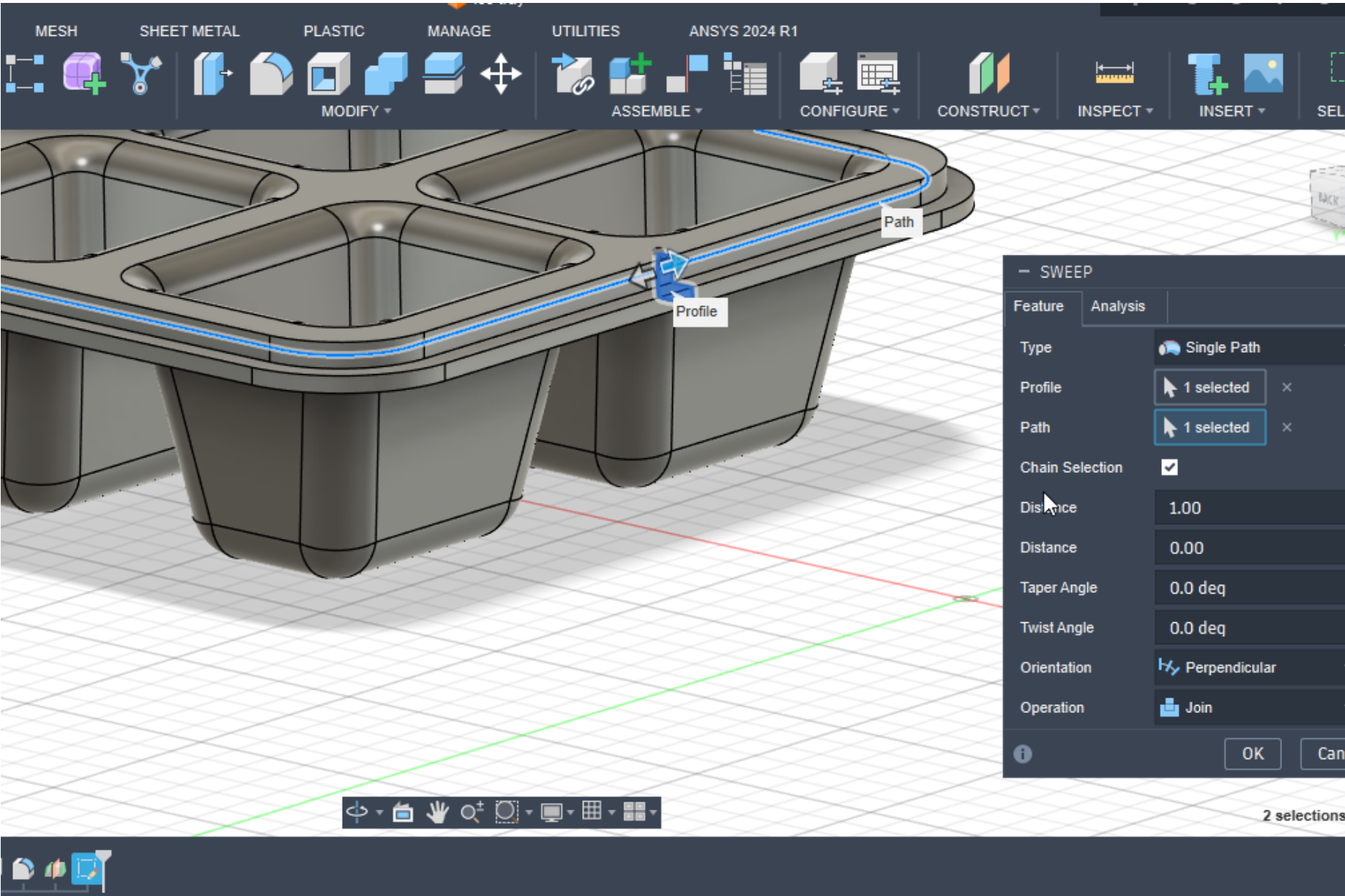
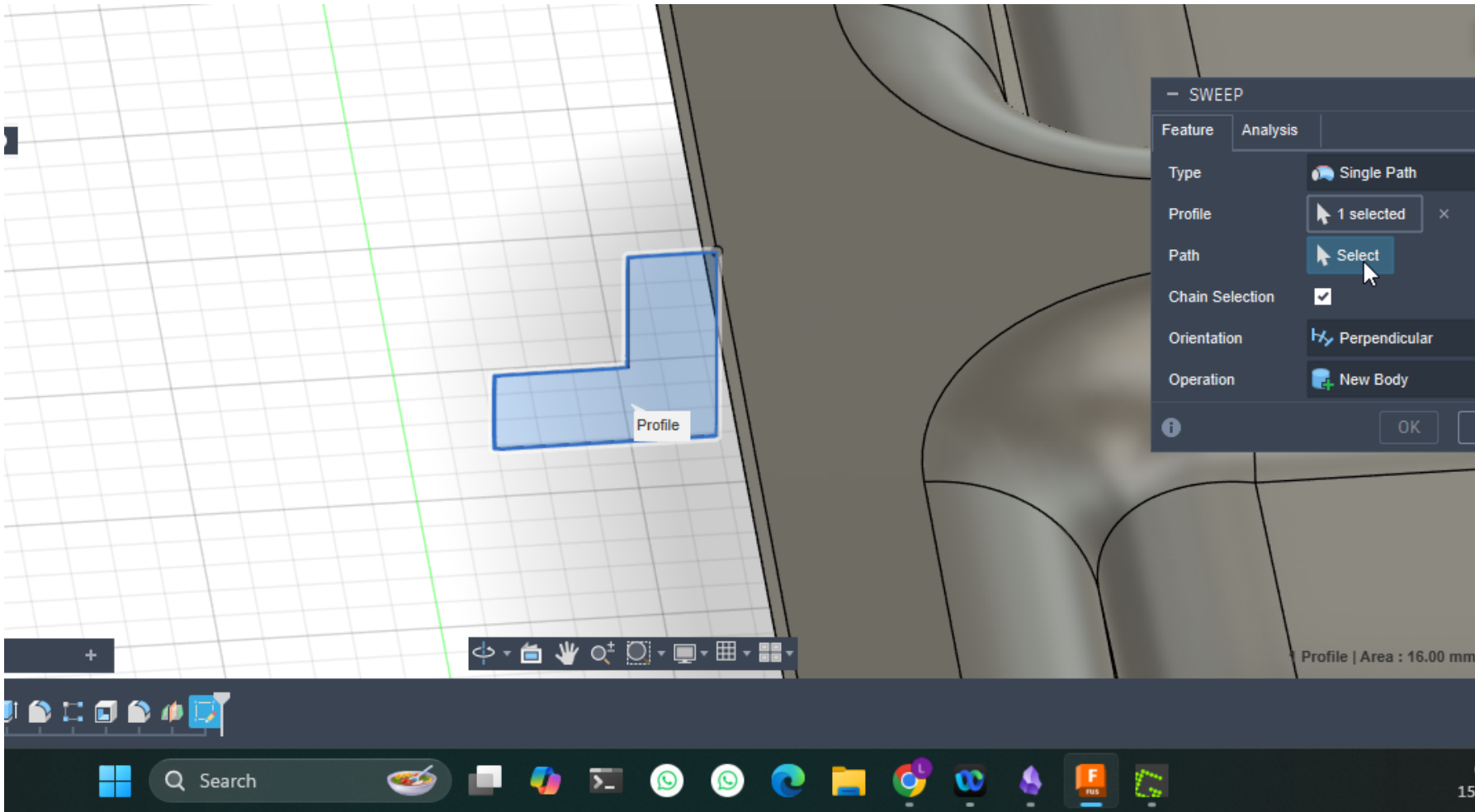


Go to **Create** → **Sweep**

- 1. **Profile** = L-shape

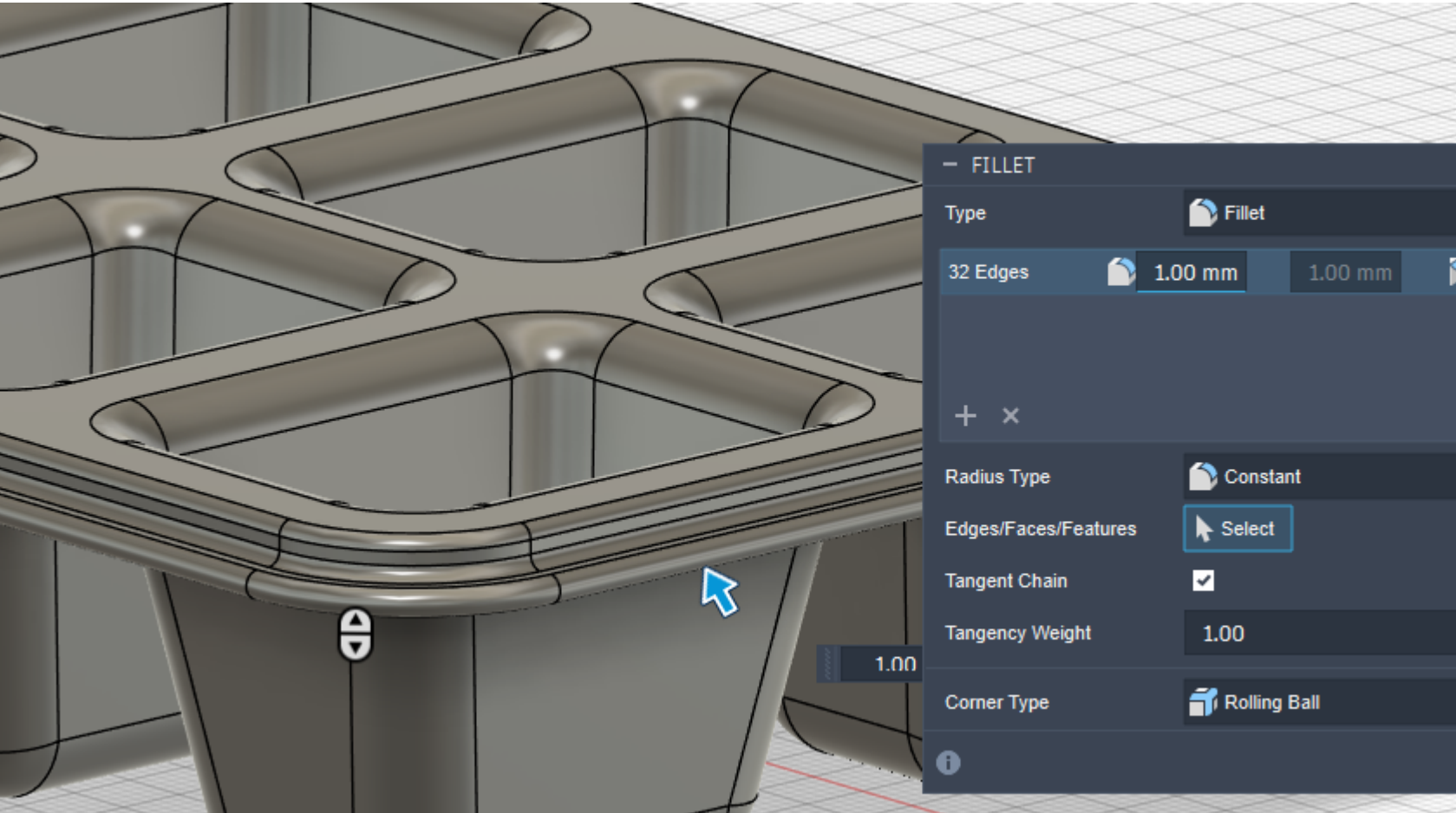


2. **Path** = full tray perimeter



This wraps the design around the entire tray.

14. Final Fillet & Finish



Add fillets to clean up sharp edges and finish the model.