LESSON GUIDE

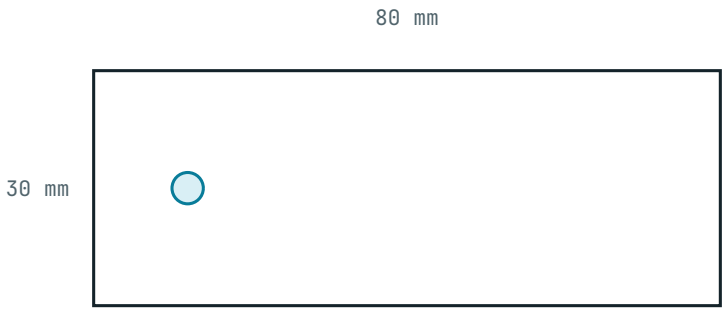
Entering exact dimensions

Give each shape a precise size in Properties, then check the rectangle and hole separately.

Software practice

No laser is needed. These projects have no machine profile and operation Output is off. The saved speed and power values are not a material recipe.

Open **name-tag-start.lzrproj**. It contains a 100 × 45 mm rectangle and an 8 mm circle. Use millimeters and select only one shape at a time.



Demonstration target: 80 × 30 mm rectangle and a 4 mm circle. Illustration, not an app screenshot.

1. Click the rectangle outline. In Properties, W is width and H is height.

2. Turn the lock between W and H **off**. Enter W **80** and press Enter or Return. Enter H **30** and apply it.

3. Click empty canvas, then select only the circle outline. Turn the W/H lock **on** so the circle stays round.

4. Enter W **4** and press Enter or Return. H should also become **4**.

5. Check each shape separately. Compare with **name-tag-complete.lzrproj**.

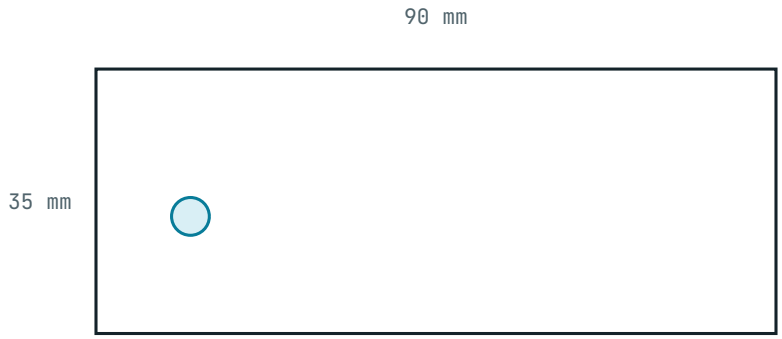
The W/H fields change the artwork's size. Zooming the canvas changes only your view.

INDEPENDENT PRACTICE

Independent practice

Start again from the original project. Try the task before opening the answer.

Make the rectangle **90 mm wide and 35 mm high**, with a **5 mm circular hole**. Keep the rectangle and hole as separate objects.



Your target dimensions. This task changes size; exact hole placement is not being graded.

☐ Use name-tag-start.lzrproj. Unlock proportions for the rectangle and lock them for the circle.

☐ Apply each entry with Enter or Return. Clear the selection before checking the other shape.

☐ Use Save As for your own copy, then compare with name-tag-practice-check.lzrproj.

Rectangle: W _____ mm H _____ mm

Circle: W _____ mm H _____ mm

If both dimensions change

Check the W/H lock. It should be off while you set the rectangle's width and height independently.

EXPLAINED ANSWER

Explained answer

Rectangle: W 90 mm, H 35 mm
The dimensions are independent. With the W/H lock off, changing the width does not force the old proportions onto the height.

Circle: W 5 mm, H 5 mm
The dimensions match because the proportion lock is on. A circle with different width and height would be stretched into an ellipse.

Check the right selection

A selection containing both shapes reports their combined bounds. Select only the rectangle or only the circle when checking an individual size.

Files in your practice pack

name-tag-start.lzrproj
Use for the demonstration and your independent attempt. Rectangle 100 × 45 mm; circle 8 × 8 mm.

name-tag-complete.lzrproj
Demonstration answer. Rectangle 80 × 30 mm; circle 4 × 4 mm.

name-tag-practice-check.lzrproj
Independent answer. Rectangle 90 × 35 mm; circle 5 × 5 mm.

The supplied files remain editable. Keep the originals and save your own work as another project. This exercise checks dimensions, not machine setup or material settings.

Matches the demonstrated Beam Bench 0.2.37 interface. Panel layout may differ in later versions.