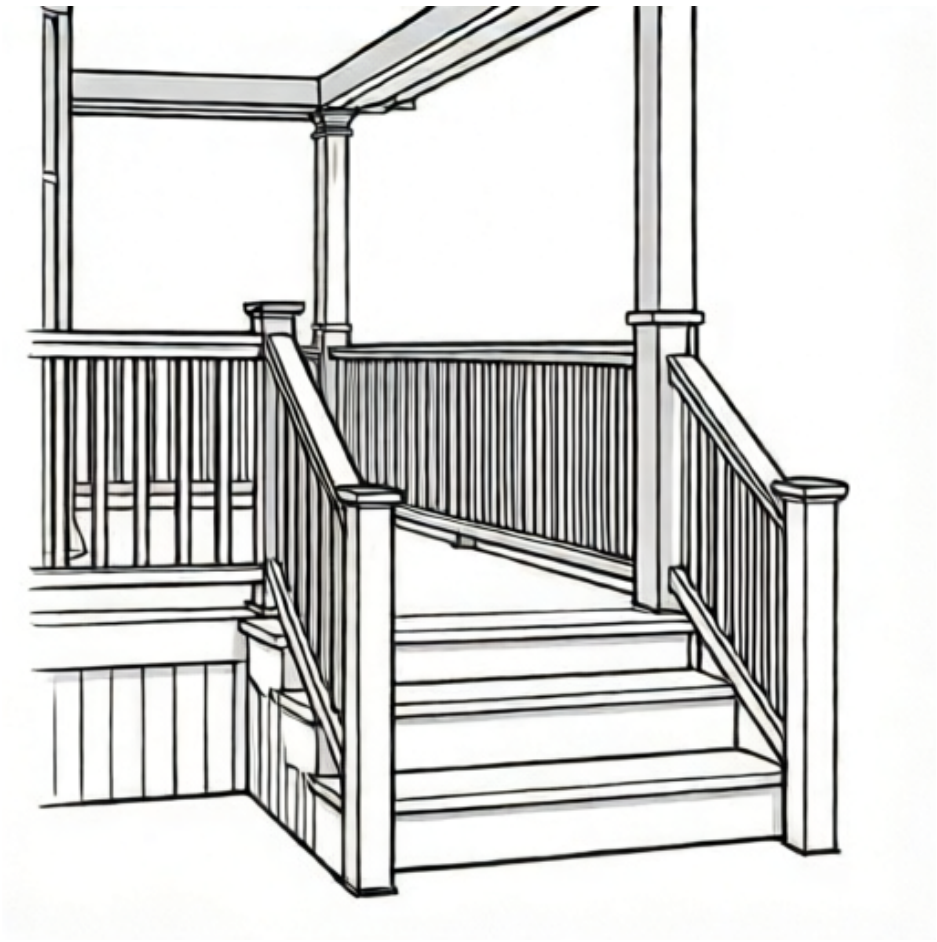
Draw a Porch: Railing Spacing and Step Depth

Topic reference / ordinary illustration



Ordinary topic reference. Hypothetical dimensions in the four tasks are supplied in their own text; this illustration is not their measured answer.

Draw a Porch: Railing Spacing and Step Depth

Worked example / complete source key

Draw a porch 4 m wide with railing posts spaced 1.2 m apart and 4 steps with 30 cm tread and 15 cm rise. Use 1 cm = 20 cm.

Answer: Porch width on paper is 20 cm. Spacing on paper is 6 cm. Gaps = 20 divided by 6 = 3.33, so use 3 gaps and 4 posts with adjusted spacing of 20 divided by 3 = 6.67 cm. Step tread on paper is 1.5 cm; rise is 0.75 cm. Total run = 4 times 30 cm = 120 cm; total rise = 4 times 15 cm = 60 cm. Label all values and check equal gaps and equal steps.