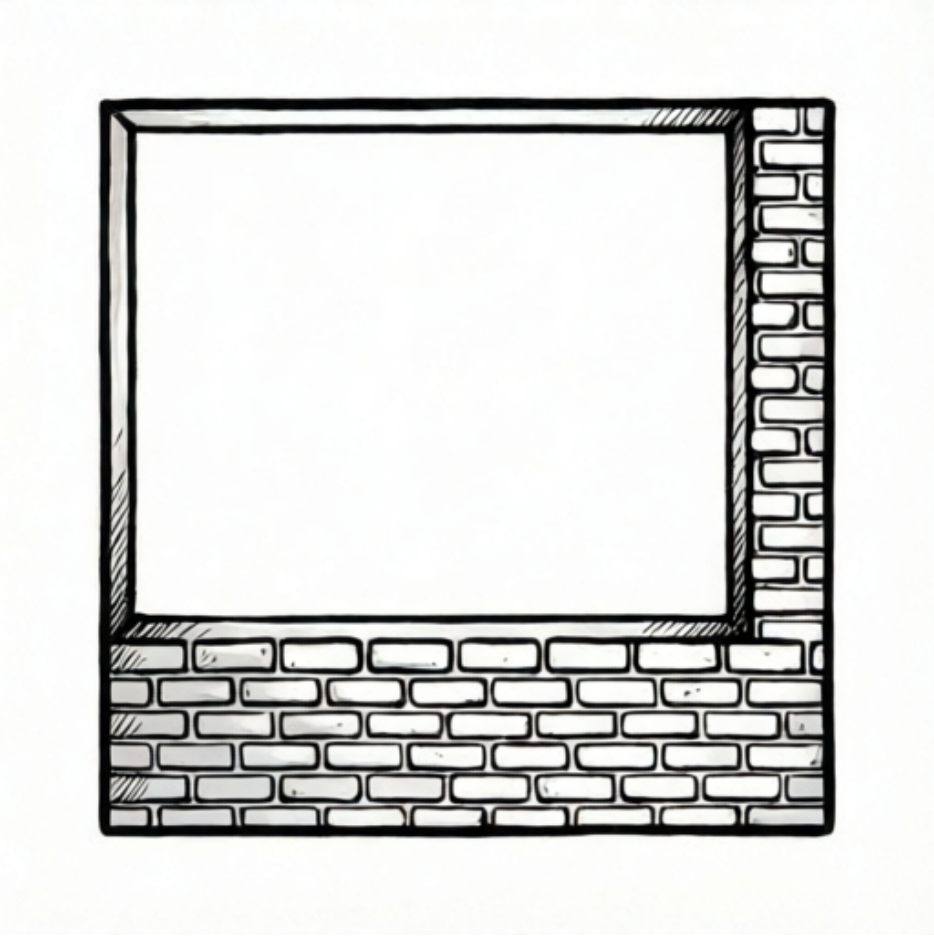
Draw a Brick Wall: Courses, Mortar Joints, and Edge Shading

Ordinary topic reference / separately checked pixels



Draw a Brick Wall: Courses, Mortar Joints, and Edge Shading

Original worked example / unchanged complete key

Prompt: A wall panel is 100 mm tall and 140 mm wide. Use 5 courses, a brick length of 25 mm, and a joint width of 5 mm. Describe the course grid and first two courses in stretcher pattern. Treat the 140 mm panel as a crop through a continuing brick grid; clip partial edge bricks without re-centering them.

Answer: Course height is 100 mm ÷ 5 = 20 mm. One repeating course period is a 25 mm brick plus a 5 mm joint, or 30 mm. Course 1 has bricks on the continuing grid from 0–25, 30–55, 60–85, 90–115, and 120–145 mm; the last brick is clipped by the 140 mm panel edge, leaving 20 mm visible. Course 2 is shifted left by 15 mm, half the 30 mm period. Inside the panel it has a 10 mm left partial brick, a 5 mm joint, four full 25 mm bricks separated by three 5 mm joints, then a fifth 5 mm joint and a 5 mm visible piece of the next brick. The course 2 joint centers are 12.5, 42.5, 72.5, 102.5, and 132.5 mm. These match the centers of the underlying course 1 bricks, including 132.5 mm for the full 120–145 mm edge brick. The visible clipped portion of that course 1 brick spans 120–140 mm and has a segment midpoint of 130 mm, but it is not re-centered when checking the continuing brick grid. Check: course 1 uses 4×25 + 4×5 + 20 = 140 mm; course 2 uses 10 + 5 + 4×25 + 3×5 + 5 + 5 = 140 mm.