

# Backfill

## Steam-Bent Shingles

Renovations are a vital part of the routine at George Washington's Mount Vernon, Va., estate, which is open to the public 365 days a year. Recently, Steve Ritter's company, Cedar Shakes and Shingles, was called upon to install decorative red cedar shingles on the bell-shaped roof of a reproduction outbuilding (1). Built into the corner of a garden wall, the original ornate, octagonal structure had apparently served as a seed shed.

The crew had to steam-bend the shingles to conform to the roof's constantly changing curvature. Shingles were placed — 10 at a time — in a vertical rack inside a homemade steam box (2), where they were “cooked.” Then each shingle was laid across a simple bending rack (3) and



weighted; PVC pipe served as a bending form (4). When needed, barbell weights provided extra bending force.

Most courses required only light steaming before the individual shingles were pressed and nailed onto the roof, where they dried in shape (5). Tighter radii, especially at the crown, called for longer steaming times — up to an hour — and smaller pipe diameters. The eight hips were meticulously woven in alternating laps to keep water out. The completed roof is capped with copper flashing and a wood finial (6). It required 128 man-hours to complete.

— Dave Holbrook

