



Making Flat Wood Shingles Look Like Curved Straw

By Lewis Lorini



This carriage house is part of an estate built in Convent Station, N.J., for George M. Allen, who was obsessed with English history. The buildings were designed by architect Charles I. Berg to resemble the thatched roofs common on the English countryside.

Wood shingle roofs designed to emulate the straw thatched roof so popular on the English countryside are almost as rare as the originals.

But in the early part of the century, when Anglophilia was in style, several of these roofs were built in the United States, including those on an estate in Convent Station, N.J. After almost a hundred years, however, these wooden simulations of thatched roofs are ready for replacement. Finding a contractor who can handle the extra-thick reveals at the eaves, irregular courses, and perhaps the trickiest feature, the curved corners at the gable ends, can be like searching for a needle in a haystack.

Edwin Peters, owner of E.J. Peters Company in Boonton, N.J., noted that by the time his crew started to work on the 80-year-old roof on the carriage house at the Convent Station estate, it was so soft that workers walking on it left footprints.

"The roof had needed attention for some time, but the owner had been unable to find anyone to work on it," Peters said.

Peters, a carpentry and general contractor, said he and his lead man had gained a lot of experience with shingles working on Cape Cod in

Massachusetts. Before starting the job, he supplemented his personal experience with information from the Cedar Shake Bureau in Washington state.

Because the courses of the roof were random in exposure, to simulate the waviness of a thatched roof, it was not essential to use clear shingles, he said.

"We decreased the exposure to about two-and-a-half inches and were able to use Red Label #2 grade shingles for the flat runs," he said.

Red Label #2 shingles are the second-best grade of cedar shingles, falling below the Blue Label #1 grade, which are the best. Red Label shingles are 18 inches, with a clear face for the first 11 inches, and with limited sapwood. However, the grain on Red Label shingles can run either vertically or horizontally, which made them unacceptable for bending on the corners. For the corners, Peters said, he needed to use Blue Labels on which the grain always runs vertically.

Installing the steam-bent shingles on the corners of the 5,700-sq.-ft. roof continued for most of the six weeks the four-man crew worked on the house, Peters said.

"It was so slow that we always had one man on the rake doing the steam

Shingles were steamed in this site-made steamer. The base of the steamer was a halved 55-gallon drum that had a plywood chamber built over it.



Shingles were placed upright on a rack in the box, while a small propane heater boiled a small amount of water in the base.

The steam-bent shingles must be installed carefully to minimize splitting. Even though the steaming loosens the wood fibers, bending the shingles 90 degrees can cause cracks if done too quickly.



work," he said.

The process of finishing the curved corners started with the selection of shingles. "We learned that if a shingle did not have some flex when it was dry, then it probably wouldn't bend," Peters said.

Suitably flexible shingles were first soaked in a bucket for an hour or so before steaming. Soaking the shingles reduced the steaming time needed to make them supple enough to bend around a 90-degree corner.

The soaked shingles were cooked for about a half-hour in the site-made steamer, and then it was a race to get them up the scaffold and on the roof before they cooled and stiffened, Peters said.

"The man on the scaffold would shout out the size he needed, and a laborer would run a few shingles up to him. After just a couple of minutes in the cold, the shingles lost the bend," Peters said.

One edge of each steam-bent shingle was hand-nailed, then the shingle was carefully bent into place and nailed. The rest of the roof was nailed with pneumatic nail guns to the spaced slats that sheathed the roof. Some of those slats had rotted and were replaced, but no underlayment was added, a modern convention that would have been disastrous, Peters said. "Wood shingles need to breathe. That is why the roof lasted almost 80 years." Modern ridge vents, however, were added.

Peters said there was an indication that shaping curved edges from basically flat material was as tedious for the builders of the original roof as it was for him and his crew. "When we opened up the roof we found more than 40 empty sherry bottles in the wall cavities," Peters said. "It's too bad they were all empty. There were days on this job when we could have used a drink." ■



The curved shingles on the edges are perhaps the most conspicuous feature of this distinct roof. Some of the shingles near the bottom of the picture are bent a full 90 degrees around the corner.