

The Vice Admiral's House

The reproduction of the Vice Admiral's House from the Popham Colony of 1607 is being constructed using the same methods, as close as can be determined, to the way the original was built. Despite the fact that this was the home of one of the more important men in the colony, the house, by necessity, was built as quickly as possible, which means it was not as finely constructed as might have been. The house was built earth-fast, crotchet construction, with wattle and daub walls. Though that might sound complicated, it was in fact the quickest and simplest way to build, and a common style during the Elizabethan period.

Unfortunately, simple construction methods such as these do not leave much archeological evidence behind. For that reason, much of what we believe about the Vice Admiral's House is conjecture, based on known techniques and evidence from other buildings at the Fort St. George sight.

Following are more detailed explanations of the period construction methods used.

Earth-fast – No foundation was laid in building the Vice Admiral's House. Rather than laying a stone or brick foundation which served as the base for the rest on construction, the framing members were sunk right into the ground. In this quick and dirty method, the posts were simply small trees with the branches trimmed off. They were not squared and did not even have the bark removed.

A two foot hole was dug for the corner posts and studs. The ends of the vertical pieces were set in the holes and the dirt filled in and pounded down around them, made fast in the earth, hence "earth-fast". Pitch pine was preferred as the pitch helped prevent rot and the ends were charred over a fire which also offered some rot protection. Despite those precautions, the framing, being set directly into the ground, would not last more than a few years. After four centuries, no more than a stain in the earth remained to mark where the posts were, and often not even that.

Crotchet Construction – The posts that formed the four corners of the building had to support horizontal pieces on top, called plates, that formed the top of the four walls. Likewise, the center poles at the gable ends had to support a ridge pole that formed the peak of the roof. In crotchet construction, the corner posts and ridge poles were formed using trees with naturally occurring V's, or crotchets, at the upper end. Rather than having to fasten the horizontal pieces to the vertical ones, the horizontal members were simply laid into the notch of the V. The studs that supported the plate between the corner posts were earth fast at the bottom and fastened to the plate with nails or wooden pegs.

Wattle – This was essentially a weaving of sticks and formed the core of the walls. Thin vertical poles were fitted in the spaces between the studs, approximately ten inches apart. Thinner twigs were woven horizontally between these vertical poles in the same way that one would weave a basket. The wattle was used as a base for the plaster, or daub, in the same way that lathe formed a base for plaster in the old plaster and lathe walls.

Daub – The daub was the plaster that was put over the wattle. Daub was a combination of dirt, clay, and chopped straw, usually a fifty/fifty mix of dirt and clay. A hole, or “daub pit” was dug in the ground and the ingredients tossed in. The builders would climb barefoot into the pit and mash the different elements together, not unlike smashing grapes to make wine. Once it was well mixed, the daub was spread over the wattle, worked into the weave of the twigs and smoothed over on the surface to make an even finish. The classic Elizabethan house, with the black beams and white plaster between, was wattle and daub, with the daub whitewashed. The settlers at the Popham colony would not have been so fancy as to use whitewash.

When a wattle and daub wall burns, the daub is fired like a clay pot and lasts for a long time. Unfortunately for the Popham Colonists, but fortunately for archeologists four hundred years later, several of the buildings at Fort St. George burned, and hardened bits of wattle and daub were found on the sight, confirming that this technique was indeed used by the colonists.

Credit: Jim Nelson, Maine Maritime Museum educator