

Interpreting Window Proportions



In our work, we often document historic houses that have been heavily modified. In some cases, the proportions of the windows can give you some guidance as to the age of the house. Because we often view the houses from the sidewalk and can't measure the window size, I am making this a little generalized.

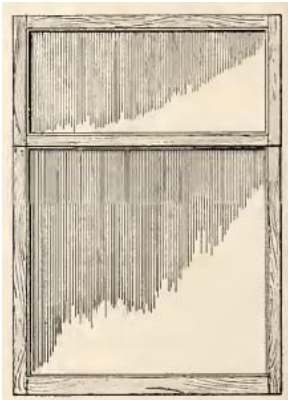
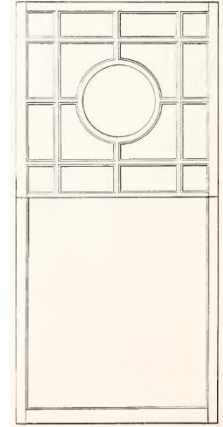
Consider the window to the left. We can tell from the lintel treatment that this house was built circa 1880. But what if we didn't have that, and all we had for our estimate was the now-replaced sashes? Here is where window proportions come into play. Each sash here is slightly taller than wide, with rough proportions of 1.2t:1w. This 1.2:1 proportion is fairly consistent throughout the nineteenth century, even while sashes gradually grew in size. Let's go through time chronologically.

The window on the right is a Federal style unit on a house built in Easton, Pennsylvania circa 1800. About 90% of Federal windows fall into three types: 6x6, 9x6, and 6x9. Nine-light sashes are slightly taller than wide, and six-light sashes are slightly wider than tall, both retaining the 1.2:1 proportions. Interestingly, a 6x9 or a 9x6 window has an opening with the general overall proportions of 2:1. One thing that happened frequently in the late twentieth century was that a replacement 1x1 window was installed there, obliterating the original window but retaining the 2:1 proportions. This is an important clue for you. A 6x6 window has the general overall proportions of 1.6t:1w.



In the 1830s, a new process for glass production greatly decreased the cost of producing window panes and enabled much larger windows. By the mid-1840s, the proportions of windows had shifted, and it was more common to see windows with proportions like the one on the left from the Hinkle catalog of 1869. [Windows under discussion here were especially common during the years 1855 to 1880.] The window illustrated here has two vertical rectangular sashes that retain the 1.2:1 proportions, with the overall proportions of 2.4:1 rather than the 2:1 from the Federal and Greek Revival periods. During the Italianate and Gothic Revival periods you will see square sashes too (with overall proportions of 2:1). You will also see windows with more pronounced vertical proportions than this one, sometimes with 2.7:1 proportions or even more.

The next shift in window proportions took place circa 1880, as the window sashes were becoming more square. For example, the Bradley & Currier catalog of 1882 offered eight window options, all with the historic 2.4:1 proportions (upper and lower sashes both 1.2t:1w). Square sashes were important to the Queen Anne style because they made it possible to have decorative and symmetrical designs such as the one on the right. This particular window happens to have a square upper sash and a slightly vertical lower sash, but if you measure it, you will see that its proportions are about 2t:1w.

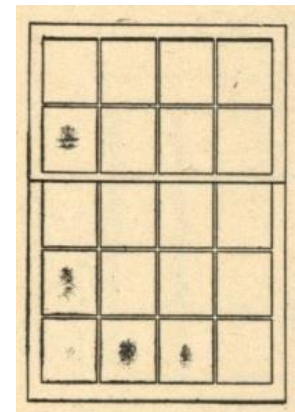


Twentieth Century

The shape of windows shifted again for the early twentieth century. Transom windows appeared in 1895 and were common through 1920. The window to the left is a simple version, without the elaborations usually found in the upper (fixed) sash. In most cases, the larger lower sash could open past the upper sash into a pocket inside the wall. This particular example has a 7h:5w proportion, or roughly 1.2:1 overall. After transom windows appeared, the earlier type of Queen Anne windows began to take on taller proportions again; the Roberts 1903 catalog only offered Queen Anne windows with the

overall 2.5:1 proportions.

Then in 1905, catalogs for the first time offered windows with an upper sash and lower sash that were both horizontal rectangles. The window to the right comes from one of those 1905 catalogs. This window has the general appearance of a transom window, with a divided upper and lower sash. Because the lights are square, it's easy to count and calculate the overall proportions for this example as 5h:4w, again 1.2:1. The shift to horizontal sashes led to later window types even more horizontal, but those houses leave less room for discussion as to their date of construction.



Two notes:

1. Although I only mentioned a few catalogs here, the information is based on many different ones. Let me know if you have a more specific question.
2. Sashes with divided lights (such as 6x6) almost always had vertical lights in the nineteenth century. Square lights were common in the early twentieth century. Horizontal lights in a divided sash made a few appearances in millwork catalogs prior to that time but were not generally in production until the 1930s.