

***Gasshō-zukuri*: Single-Story Houses with Multiple Levels**

Gasshō-style houses in Shirakawa-gō are made up of two sections that are almost entirely distinct, both in their construction and in their use. The ground floor was built by professional carpenters from carefully hewn lumber. The attic and roof, however, were built and thatched by the villagers themselves using comparatively simple materials harvested from the surrounding mountains. The ground floor was where daily living—including cooking, eating, and sleeping—took place. The attic, on the other hand, was reserved for raising silkworms, which was Shirakawa-gō's primary industry. Although the attics were essential for the family's livelihood and often high enough to contain multiple floors, *gasshō*-style homes are still considered single-story houses.

Open-air hearths called *irori* occupied the central room of the ground floor. When these were used to cook meals or heat the home, soot would cover the wooden posts and beams, blackening them and serving as a natural insect repellent. The fire in the hearth also kept the attic dry, which was beneficial for silkworm cultivation. Many of the museum's houses have solid wooden floors in the attics, but these were added later so that visitors can walk through them more easily. In their original state, the attic floors had loosely spaced slats that allowed the hearth smoke to pass up from below. The slatted floors also improved air circulation.

Traditionally, the houses were all oriented in the same direction. In Shirakawa-gō, strong seasonal winds blow along the river that flows from north to south, so the roofs were built with their ridgelines parallel to the river. This minimized wind load on the house and also regulated the amount of sunlight shining on the roofs. Because the two sides of the roof faced east and west, they facilitated the melting of accumulated snow. In the morning, the eastern side was exposed to the full rays of the morning sun, and the west side received equal sunlight in the afternoon. This clever method used natural energy to protect the roofs from the crushing weight of built-up snow.