

Castle Defenses: Loopholes

The rectangular openings in the walls of the Great Keep allowed defenders to shoot arrows and fire muskets down at attackers. These openings, called “loopholes,” were incorporated into many defensive structures, such as gates and walls. Loophole openings can be rectangular, circular, or triangular in shape, and they are often fitted with wooden covers to keep out rain and wind.

There are a total of 110 loopholes built into the Great Keep, the Northwest Tower, and the Roofed Passage. The square openings were designed for long-barreled muskets, while the taller rectangular openings were for soldiers using bows. Many of the square loopholes are placed lower on the wall, indicating that gunners fired from a crouched or kneeling position.

The distance from the loopholes to the edge of the inner moat measures approximately 60 meters, which was also the farthest range at which a matchlock musket could accurately be fired. The number and positioning of the square loopholes reflects the predominance of gun warfare in the late sixteenth century, when Matsumoto Castle was constructed.