

The Structure of the Castle Foundation

The stone walls of the castle's foundation were built using rough-hewn rock taken from nearby mountains. In this style of masonry, which was common in the latter half of the sixteenth century, the rocks are lightly worked (or "dressed") with chisels to fit them together. Although lightly worked stone was considered less refined than cut stone, lightly worked stone walls required less labor and could be completed more quickly. The gaps left between the stones allowed rainwater to drain through the foundation, protecting the lowermost sections of the castle from rot. For added stability, long rectangular keystones were placed at the corners in alternating directions.

Matsumoto Castle is located on a composite alluvial fan, and there was a risk that its foundation would gradually sink, causing the Great Keep to collapse. When the castle was built, internal support structures were used to shore up the foundation and prevent it from sinking. Before constructing the stone walls, the builders laid 3-meter logs at roughly 50-centimeter intervals along the area that would become the bottom of the foundation. Additional timbers were then laid perpendicularly on top of this structure, creating "pillows" that would support the larger stones at the base. This created a raftlike structure that would more evenly disperse the weight of the keep.

As a final measure, two rows of logs were driven vertically into the ground under the moat roughly 5 meters from the foundation. These outer rows were believed to further solidify the soil and prevent the entire section of earth from shifting or sliding.