

Applied Symmetry - Medieval Floor Tiles Excavated at the Castle of Kronberg

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Kronberg castle, situated at the Taunus hills near Frankfurt/Main, consists of three parts according to the erection of buildings: a fortification on top of the rocky hill (~ 1200 AD), its extension with “high house” and church (~ 1340 AD), and the noble houses of the two main parts of the family of Kronberg knights (from ~1430–1475 AD). After the last knight died in 1704, the buildings were used in many ways by citizens and officers of the Mainz administration. When Empress Victoria (daughter of Queen Victoria, wife of the German Emperor Friedrich III and mother of Emperor Wilhelm II) received the castle, the buildings were rather damaged but she had them restored, using her private money. After she died in 1901, it was handed over to her daughter Margarete, who was married to the Landgraf of Hessen. Her greatgrandson, whose mother was Princess Mafalda of Savoyen, sold it to the city of Kronberg in 1989, and in 1992 it changed into the foundation “Stiftung Burg Kronberg im Taunus”.

Countless remainders of earthen kitchenware and at least six different floor tiles containing various elementary cells have been found in the large areal. All tiles are designed to form patterns with fourfold rotations, with the plane group **p4m** most frequently occurring. The elementary cell may cover only parts of a single tile. The fragments have been used for filling materials of gardens and masonry of later buildings. They could originate from the “high house”, as they were also found in vaults erected ~1470 AD.

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