

The construction and measurements

The Construction

The design of Trelleborg is based on geometry and symmetry. The layout shows that the builder had the 'four corners of the world' marked out in the circular fortress great accuracy. The inner street system meets in a right-angled cross and connects the four gates. Within the circle, four identical blocks consisting of four houses forming a square are situated in each quadrant.

In the second phase of the building, the bridge and 15 houses on the bailey are added from outside of the rampart. The whole installation covers an area of six hectares which is equivalent to 12 football pitches.

Measurements

The degree of precision in the structure is so great that there can be no doubt that a fixed unit of measurement was used. The so-called 'Trelleborg ell', which is 49.3 cm, has been uncovered on the basis of an analysis and computerprocessing of the excavation drawings from Trelleborg. Before this, the excavators presumed that a shortened version of the 'Roman ell' was used. The relationship between the two units of measurement is 12 to 10, so that the 12 'Trelleborg ells' equals 10 'Roman ells'.