Let K be a totally real number field and $\mathcal{O}_K$ be its ring of integers. We say that a quadratic form with the coefficients in $\mathcal{O}_K$ is universal over K if it is totally positive definite and represents all the totally positive elements of $\mathcal{O}_K$. For a squarefree positive integer D let $R(D)$ denote the minimal rank of a universal quadratic form over $\mathbb{Q}(\sqrt{D})$.

The aim of the talk is to present results regarding the typical size of $R(D)$. In particular, we will show that if $\varepsilon > 0$ is fixed, then for almost all the numbers D (in the sense of natural density) $R(D)$ is greater than $D^{\frac{1}{24}-\varepsilon}$.

The talk is based on my joint work with V. Kala and P. Yatsyna.