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The notion of uniform embedding of metric spaces plays an important role in study of large scale properties of finitely generated groups. A map $f: X \rightarrow Y$ of metric spaces (X, d_X) and (Y, d_Y) is called a *uniform embedding* if there are two real functions ρ_- and ρ_+ with $\lim_{r \rightarrow \infty} \rho_-(r) = +\infty$ such that $\rho_-(d_X(x, z)) \leq d_Y(f(x), f(z)) \leq \rho_+(d_X(x, z))$ for all $x, z \in X$. For example, a bi-Lipschitz map is a uniform embedding with linear functions ρ_- and ρ_+ . If one tries to embed a given space X uniformly into Hilbert space, how close to bi-Lipschitz could the embedding be? We answer this question for finite dimensional CAT(0) cube complexes and for hyperbolic groups with word metric. (Received August 22, 2005)