Jennifer Johnson-Leung* (jenfns@uidaho.edu), Department of Mathematics, University of Idaho, PO Box 441103, Moscow, ID 83844-1103, and Brooks Roberts. Siegel modular forms of degree two attached to Hilbert modular forms.

Let $E/\mathbb{Q}$ be a real quadratic field and $\pi_0$ a cuspidal, irreducible, automorphic representation of $\text{GL}(2, \mathbb{A}_E)$ with trivial central character and infinity type $(2, 2n + 2)$ for some non-negative integer $n$. We show that there exists a Siegel paramodular newform $F : \mathcal{H}_2 \to \mathbb{C}$ with weight, level, Hecke eigenvalues, epsilon factor and $L$-function determined explicitly by $\pi_0$. We tabulate these invariants in terms of those of $\pi_0$ for every prime $p$ of $\mathbb{Q}$. (Received September 20, 2009)