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We present new ways in which field extensions of a finite field \mathbb{F}_q can be used to construct error-correcting codes over \mathbb{F}_q . These codes can have better parameters than more traditionally defined AG codes over the same field. In fact, this technique provides the explicit construction of codes such as some improved Hermitian codes. We show how computation of the code parameters depends on knowledge of the extensions used. (Received September 23, 2005)