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In 1989 Glasner and Maon introduced the idea of uniform rigidity as a topological analogue of classical rigidity in ergodic theory. This seems to be the correct topological analogue as similar generic properties hold in both settings. A homeomorphism T of a compact metric space X is said to be uniformly rigid if there exists an increasing sequence of natural numbers (n_m) such that T^{n_m} converges to the identity uniformly on X . We will use category arguments to construct large families of weakly mixing homeomorphisms of the two-torus and Klein bottle that are uniformly rigid. Then we will use these category arguments to give results toward characterizing their uniform rigidity sequences. (Received August 12, 2012)