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Let $m(k)$ denote the smallest positive integer m such that any m -fold covering of the plane with axis-parallel unit squares splits into at least k coverings. We show that $m(k) = O(k^2)$, and generalize this result to translates of any centrally symmetric convex polygons in the place of squares. For unit disks, instead of squares, it is not known whether the corresponding function is finite. (Received February 16, 2007)