The famous Turán-type problems study the maximum fraction of a structure one may select without selecting certain forbidden configurations. Stated in terms of complements, our problem is: given a set $S$ of rectangles of specified dimensions, we want to determine the minimum density of a set $A$ of points in $\mathbb{Z} \times \mathbb{Z}$ such that every copy in $\mathbb{Z} \times \mathbb{Z}$ of any rectangle in $S$ has at least one of its four vertices in $A$; in this case we say that $A$ is a covering set for the rectangles in $S$. It is trivial that covering all $a \times b$ rectangles requires precisely $1/4$ of the lattice. Our first result is that the covering density for $1 \times 1$ and angled $\sqrt{2} \times \sqrt{2}$ squares is also $1/4$. The primary focus of our work was on covering two different sizes of axis-aligned rectangles. Covering both $a \times b$ and $b \times a$ rectangles requires just $1/4$ of the lattice (no more than just $a \times b$), though the patterns which do so vary with the relative parity of the dimensions. We also have results on covering pairs of squares, which lead to a general conjecture in that regard. Finally, we have determined the exact required covering density required for $a \times c$ and $a \times d$ rectangles. (Received September 21, 2015)