A convex universal cover of a family \mathcal{M} of sets in the plane is a convex set that contains a congruent copy of every element of \mathcal{M} . Park and Cheong conjecture that for every family of triangles with bounded diameter there exists a triangle that is a smallest universal cover of this family. We prove this conjecture for

- every family of all triangles with the lengths of their two sides fixed,
- every family of all triangles with the length of a side and the size α of the opposite angle fixed (where α is from an interval $(0, \lambda] \cap [3\pi/7, \pi)$ with λ being approximately 0.396π),
- every finite subfamily of a family of all triangles with the length of a side and the size α of the opposite angle fixed (where $\alpha \geq \pi/2$).