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We have previously demonstrated that visually interesting open lattice structures can be created by replacing edges with flexible rectangular plates in regular polyhedra. The plates are connected at corners resulting in a open lattice structure where vertices and faces are transformed into open space and edges are rectangular plates. In this work, we show constructions based on uniform tessellations of the plane and prove that exactly four (3·3·3·3·3·3, 4·4·4·4, 6·6·6, and 6·3·6·3) will remain planar after this edge expansion procedure. These sheets can be rolled into cylindrical tubes of arbitrary length along either of the two primary symmetry axes of the corresponding tessellation. Capsules can be constructed by capping the tubes with sections of regular polyhedra, specifically pyramids, cupolas, and rotundas. Example constructions for a variety capsules will be shown. (Received July 22, 2016)