Realizing the Möbius Strip as a polyhedron



We take the standard approach to viewing the Möbius Strip as the quotient of a rectangle with the two short sides identified by a reflection which switches the top and bottom vertex (see the drawing). The drawing above indicates how one can construct a triangulation of this space. There are six vertices, twelve edges and six faces. Two pairs of vertices in the large rectangle which are identified, and the two edges at the ends are also identified.