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Noel P Brady* (nbrady@math.ou.edu), Department of Mathematics, University of Oklahoma, 601 Elm Ave, Norman, OK 73019, and **John Crisp**. *CAT(0) and CAT(-1) dimensions of torsion free hyperbolic groups.*

We show that a particular free-by-cyclic group has CAT(0) dimension equal to 2, but CAT(-1) dimension equal to 3. We also classify the minimal 2-dimensional CAT(0) actions of this group; they consist of a 1-parameter family of piecewise euclidean, CAT(0) 2-complexes.

This is used to produce an infinite family of 2-dimensional hyperbolic groups, which do not act properly by isometries on any proper CAT(0) metric space of dimension 2. This family includes a free-by-cyclic group with free kernel of rank 6. (Received February 20, 2005)