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Arkady Berenstein, Department of Mathematics, University of Oregon, Eugene, OR 97403, and
Michael Kapovich* (kapovich@math.ucdavis.edu), Department of Mathematics, University of
California, Davis, CA 95616. *Rank 2 nondiscrete affine buildings.*

In his work classifying spherical and affine buildings, J.Tits proved that every (irreducible) thick affine building of rank at least 3 is associated with an algebraic group over a field. In particular, it follows that the finite Weyl groups of such buildings have to be crystallographic. We complete this picture by constructing rank 2 thick nondiscrete affine buildings associated with an arbitrary finite dihedral group. (Received February 25, 2009)