J. Murray. How to Compute the Frobenius-Schur Indicators of the Characters in a 2-Block.

Our method exploits the extended defect group of a real 2-block, discovered by R. Gow. The pair (defect group, extended defect group) determines the number of real characters in the block. Module theoretic techniques can then be used to classify the underlying representations as being orthogonal or sympletic. We illustrate with 2-blocks that have cyclic or dihedral defect groups .