

1014-N1-1024      **B. Lynn Bodner\*** (bodner@monmouth.edu), Mathematics Department, Monmouth University,  
West Long Branch, NJ 07764. *Classifying the Frieze Patterns of Seville's Real Alcazar.*

For several hundred years after the reconquest by the Christians in 1248, Seville remained under the influence of Islamic artistic models. Contemporary with the Alhambra, the Real Alcazar was rebuilt as a palace in the Mudejar style for Pedro the Cruel, king of Castile (1334 - 1369) in 1364. (Muslims in Spain who converted to Christianity after the reconquest were known as Mudejars.) Mohammed V, the Nasrid sultan of Moorish Granada and a friend of King Pedro, sent Islamic artisans, craftsmen and materials for the construction and decoration of the Alcazar, which has been used as a residence by the Spanish royal family ever since. And, although there have been alterations and additions over the centuries, this remarkably well-preserved palace retains its Islamic character, containing some of the most beautiful examples of Mudejar alicatado (Spanish for cut tiles, derived from the Arab verb qata'a, "to cut") from this time period.

This paper will briefly discuss and then illustrate examples of the seven possible one-dimensional symmetry groups found in the frieze pattern designs present in the alicatado of the Alcazar. Each pattern, most of which are recognizably Islamic in character, will also be classified as to the symmetry elements it permits. (Received September 26, 2005)