Band storage is a storage method that compacts large banded systems by storing diagonals as rows in a band matrix. It is shown that the storage method is very efficient, with it being the second smallest file out of the storage methods that were tested, with a file size of 1848 bytes. This is because, unlike some other storage methods, only stores a smaller section of the original matrix. Band storage only stores the diagonals of a banded system as the rows of the band matrix, and not any of the zeros of the top right or bottom left.

This method results in a matrix with the same number of columns as the original and rows equal to the bandwidth of the original matrix plus 1 if it is symmetric positive definite. The bandwidth of the matrix *A* is 6 and because it is an SPD, the band form will have 7 rows resulting is a decrease of 26 rows over the original matrix.

The runtime to solve a linear system using band storage was around third fastest out of the eight methods tested. Taking an average of 20 trials, the time it took to solve the linear system was 0.0003 seconds. It can be this fast because there are less rows to perform the Cholesky factorization, backward substitution, and forward substitution on. Band storage also has the least number of flops out of all the methods tested and has a fill-in percentage of 0.1915