A Mutilated Chessboard

I want to mutilate a chessboard (an 8x8 grid) by removing squares from it.

My goal is to satisfy both of these conditions:

- 1. To make it impossible to put even one domino on the board (where a domino is a 2x1 or 1x2 piece).
- 2. To make sure that replacing any one of the removed squares will enable a domino to be put on the board.

For example, it is possible to accomplish this by removing 32 squares.

Investigate the minimum and maximum number of squares that can be removed.