The starting position for Fischer random chess must meet the following rules:

* White [pawns](http://en.wikipedia.org/wiki/Pawn_(chess)) are placed on their orthodox home squares.
* All remaining white pieces are placed on the first rank.
* The white [king](http://en.wikipedia.org/wiki/King_(chess)) is placed somewhere between the two white [rooks](http://en.wikipedia.org/wiki/Rook_(chess)).
* The white [bishops](http://en.wikipedia.org/wiki/Bishop_(chess)) are placed on opposite-colored squares.
* The black pieces are placed equal-and-opposite to the white pieces. For example, if white's king is placed on b1, then black's king is placed on b8.

Note that the king never starts on file a or h, because there has to be room for a rook.

There are many procedures for creating this starting position. Hans L. Bodlaender has proposed the following procedure using one six-sided die to create an initial position; typically this is done just before the game commences:

* Roll the die, and place a white bishop on the black square indicated by the die, counting from the left. Thus 1 indicates the first black square from the left (a1 in [algebraic notation](http://en.wikipedia.org/wiki/Algebraic_notation)), 2 indicates the second black square from the left (c1), 3 indicates the third (e1), and 4 indicates the fourth (g1). Since there are no fifth or sixth positions, re-roll 5 or 6 until another number shows.
* Roll the die, and place a white bishop on the white square indicated (1 indicates b1, 2 indicates d1, and so on). Re-roll 5 or 6.
* Roll the die, and place a [queen](http://en.wikipedia.org/wiki/Queen_(chess)) on the first empty position indicated (always skipping filled positions). Thus, a 1 places the queen on the first (leftmost) empty position, while a 6 places the queen on the sixth (rightmost) empty position.
* Roll the die, and place a [knight](http://en.wikipedia.org/wiki/Knight_(chess)) on the empty position indicated. Re-roll a 6.
* Roll the die, and place a knight on the empty position indicated. Re-roll a 5 or 6.
* Place a white rook on the 1st empty square of the first rank, the white king on the 2nd empty square of the first rank, and the remaining white rook on the 3rd empty square of the first rank.
* Place all white and black pawns on their usual squares, and place Black's pieces to exactly mirror White's (so Black should have on a8 exactly the same type of piece that White has on a1).

This procedure generates any of the 960 possible initial positions of Fischer Random Chess with an equal chance; on average, this particular procedure uses 6.7 die rolls. Note that one of these initial positions is the standard chess position, at which point a standard chess game begins.

It's also possible use this procedure to see why there are exactly 960 possible initial positions. Each bishop can take one of 4 positions, the Queen one of 6, and the two knights can have 5 or 4 possible positions, respectively. This means that there are 4\*4\*6\*5\*4 = 1920 possible positions if the two knights were different in some way. However, the two knights are indistinguishable during play; if they were swapped, there would be no difference. This means that the number of distinguishable positions is half of 1920, or 1920/2 = 960 possible distinguishable positions.