

Patio Block

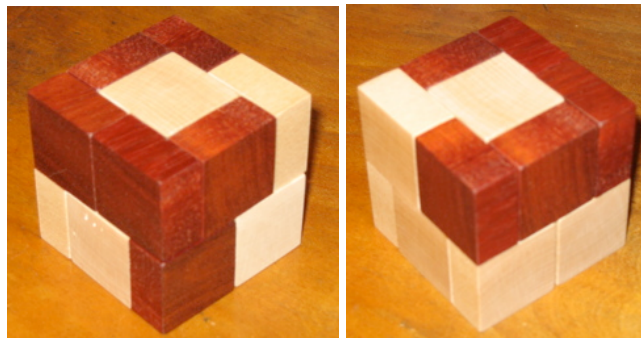


*Designed by Stewart Coffin circa 1975, made by Interlocking Puzzles 2001.
(8 pieces, maple and bloodwood, 2 inches assembled)*

The wood used to make this puzzle gives a clue to the solution with symmetric color shown above; the photos below show three basic steps to this solution:



It is not unique, here are two views of another solution:



Stewart Coffin, in his book *The Puzzling World of Polyhedral Dissections*, describes the derivation of this puzzle as starting with all possible pairs of joined 1x2x2 blocks (where the resulting 10 pieces can be assembled into a 4x4x5 solid in 25 different ways) and then eliminate the two rectangular pieces (the 1x2x4 piece and the 2x2x2 piece) to see if the remaining 8 pieces can be assembled into a cube. He then goes on to say that they cannot be so assembled, but that one can be eliminated and one duplicated to make a set that can. He also notes "an interesting pattern of symmetry" in the solution.

The 1986 patent of *Guenther* describes puzzles where pieces are formed from pairs of rectangular solids.

Further Reading

Guenther Patent, from: www.uspto.gov - patent no. 4,534,563