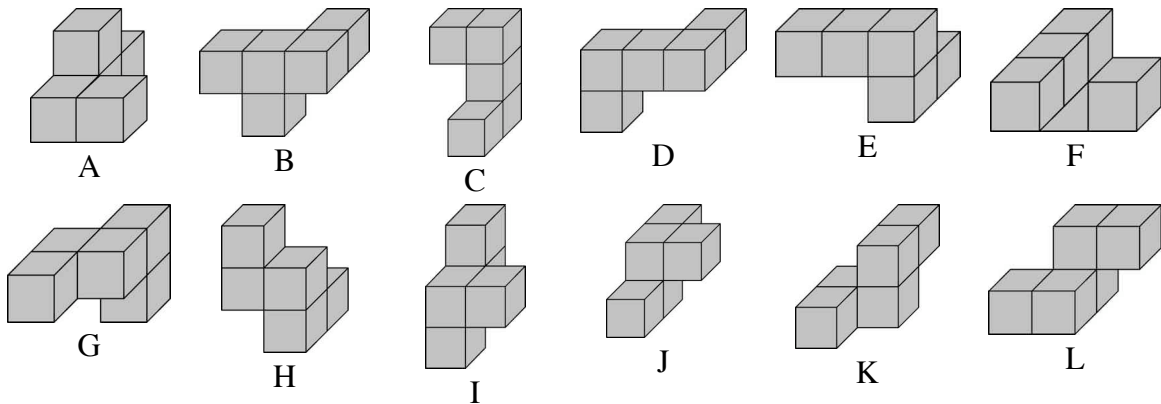


Twin Box Pentominoes



*Designed by P. F. Ramos 2004, made by Interlocking Puzzles.
(wood frame and 12 pieces, 3.75" x 3.75" x 3" inches)*

Standard *pentominoes* are the 12 different planar shapes that can be formed from 5 squares. There are 17 *non-planar* pentomino shapes (each made from 5 cubes). Here, 12 of them (which can be grouped into 6 mirror image pairs) must be packed into a 4x5x5 box frame; 40 units are used by the frame, leaving exactly 60 units of space to pack these pieces:



According to the sheet that came with the puzzle there are 54,189 possible ways these pieces can fit (in the sense that you could build the box around them), of which 23,549 of them can be achieved by starting with the box frame and inserting and moving pieces. Here is the layer by layer representation of the solution that came with the puzzle (X is the box):

<i>top layer:</i>	<i>2nd layer:</i>	<i>3rd layer:</i>	<i>bottom layer:</i>
XXXXX	XGAIX	XGBIX	XXXXX
XJAFX	GGAFF	BBBII	XBEIX
XJJFX	GJAAK	EEELL	XHELX
XCCFX	HJCDK	HHCKK	XHLLX
XXXXX	XDDDX	XDCKX	XXXXX

In the orientations shown in the figures above, pieces can be inserted as follows:

- | | | |
|-------------------|----------------------|-----------------------|
| 1. B from behind. | 5. H from below. | 9. F from behind. |
| 2. I from behind. | 6. A from behind. | 10. C from above. |
| 3. G from behind. | 7. L from the right. | 11. J from the top. |
| 4. E from below. | 8. K from the front. | 12. D from the front. |