

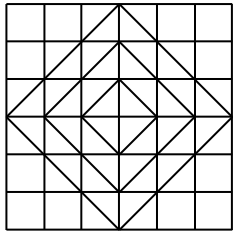
Square Interlace Tessellation

designed in 2015 by Michał Kosmulski — <http://michal.kosmulski.org/origami/>

This tessellation uses a molecule based around a 6×6 grid. The image to the right shows a 5×5 array of molecules with an extra unit of margin added around the border so that it can be folded from the convenient 32×32 grid.

One way to collapse a single molecule is as follows:

1. Precrease three squares rotated 45° relative to the grid:



2. Fold a square twist around the middle square which has a side length of two unit diagonals. You can find instructions for folding square twists online.

3. The top part of the twist is a square. In its center there is a smaller precreased square with a side length of 1 unit diagonal. Valley fold along the sides of this square until the centers of the larger square's sides meet at a single point and the whole model lies flat. This intermediate stage is called Propellers Tessellation.

4. Reverse-fold the four triangular flaps. Your molecule of Square Interlace Tessellation is ready.

5. The complete tessellation tends to curl since there are many more layers of paper on one side than on the other. You can use wet folding to mitigate this (with proper paper). Smear a little water on a table or another flat surface, then place the tessellation in the wet area and make sure the one-unit margin around the model is wet and sticks to the table. You should use enough water for the back to become wet but as little as to not allow the layers above to soak water. Place something flat on top, put something heavy, like a few books, on top of it and leave for a few hours. Then, remove everything but do not move the tessellation yet. Let it dry in place for another few hours until it's completely dry and doesn't stick any more. You should now have a completely flat back and very little curling.

