Moorish Stars

This design is based on a traditional Islamic tiling, utilizing very thin rhombic shapes and large irregular hexagons. I’ve had this pattern stuck in my head for some years, and only recently gave it another try. The method of how this works is a combination of the hinged-pleat style used in flagstone tessellations, and the traditional straight-pleat style used in the kinds of tessellations more commonly known to origami folders. This hybrid technique allows for easier construction of certain shapes and forms which would otherwise be difficult or impossible to create.

I’m very pleased with how the pattern turned out, and how clean the lines are in this design. Give it a try yourself and see what you think!

A triangular grid of 32x is the absolute minimum—I’d recommend at least a 48x grid for even better results (divide by three, then keep dividing pleats by two, arriving at 48; one of my favorite sizes).

I’ve left some of the superfluous creases out of the pattern this time, trying out some different nomenclature for fold indications. The usual “solid-black-line for mountains, dashed-line for valleys” system is used.
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Close up of the front.

Notice how the hinged pleats create the flagstone-style gap between the stars and the hexagons surrounding them. Compare this with the simple straight pleats that make up the hex twists at the center of the stars.

The reverse side.

The pleats are not folded flat, but instead left in a three-dimensional state. One can, of course, fold the entire pattern flat, although I feel this takes away some of the beauty of the pattern. As always this choice is entirely up to the folder.

The reverse side from a different angle.
To fold this crease successfully, it is important to use a wet-folding technique. Dampen your finger and press the point where the pleats come together, and hold for 30 seconds or so. With a strong paper like Elephant Hide, this will help to lock the paper together.

A backlit view of the front side, for reference.

A backlit view of the reverse side.
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Symbol denotes a hex twist