

Here is another approach to making this sphere without having to go through the rhombidodecahedron.

Fold the inside/out tetrahedron and open the flaps to form 3 tetrahedra intervals. Push the 90° edge of the flap in and re-crease on the 60° creases.

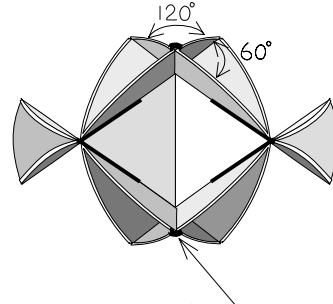
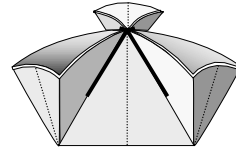
Join 2 inside/out tetrahedra edge-to-edge using bobby pins at the intersections forming two 180° crossings. The intervals that are formed are 60° and 120° . This joining of 2 units shows the same angles and intervals reflected in the VE.

Make 2 sets of 2 tetrahedra joined as above. Put them together so the opened flap ends form a square interval. This will leave 4 half-square intervals on each of the 4 sides. It will be unstable until the other half is pinned in place.

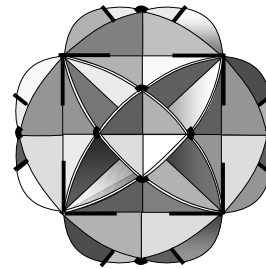
Make another set of 4 tetrahedra the same way. Join the 2 sets of 4 tetrahedra together edge-to-edge, completing the remaining square intervals. This will form the complete sphere. It is very strong.

To the right are drawings showing the 3 views of symmetry. The first is viewed from the square open plane, an octahedron interval. The second shows the sphere directly from the rhomboid plane along the longest axis, formed by 4 points of circle intersections. This octahedral interval has tetrahedral intervals on each side. The bottom image shows a point symmetry. This is the same alternate triangle and square relationship as the VE (p.244), only with increased proportional rhythmic openings.

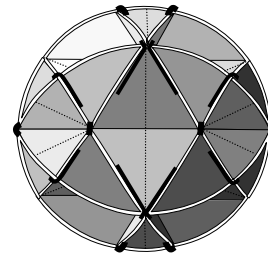
The openings allow you to expand out by adding tetrahedra and octahedra into the intervals.



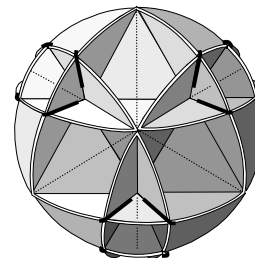
edge to edge joining using bobby pins



square plane symmetry



rhomboid line symmetry



tetrahedron point symmetry