A Geometry of Early Islam — The Circle Method and a Window

"3D Thinking" Page 187: The animation below shows the Arabian "close-packing" circle method that was used to create the window design of the 1356CE Madrasa of Amir Salf al-din Sargatmish in Old Cairo, Egypt. The design method dates back to the Abbasid period — a time of great creativity. The development starts with (i) a photo of the actual window and then follows with line drawings (ii) a line drawing of the window (iii) the rosette design (iv) the close-packing circle construction with the rosette development (v) the closepacking circle construction with circle centers connected (vi) the close-packing circle construction and tangent polygons with internal radii. Where the lattices of the last two drawings are "Altair Designs," and both function as "perceptual lattices." If the ABJAD system was used then the numerology revolves around the number '8' and then an ABJAD manipulation of the numbers 5,6,7 — with a possible meaning of 'storehouse' or 'treasure chest.'

http://rogerburrowsimages.com/wp-content/uploads/2017/12/Wi ndowsB.mp4