

Muqarnas | A Fresh Exploration of an Old Technology

Architects have always strived to create spaces that engage the human form. This aspiration for increasingly complex space eventually resulted in the invention of muqarnas. This technology is based on a 2-dimensional tiling from which prisms are extruded and cut along a curve. The tiling we chose formed a fourteen sided polygon which contained two conflicting seven-fold radial symmetries. This conflict when projected into 3-dimensional space creates a visual tension which initiates from the exterior and progresses into the center where it resolves itself. These conflicting curves are the driving force of the aesthetic, creating shadows that crawl down the aggressive forms. While traditional muqarnas are no longer constructed, its implications in modern architecture are substantial. With the introduction of modern materials and the inherent strength of these forms, it is possible to use them as resilient structural roof systems, generating a provocative form which celebrates light and space.