COTROCENI DOME

Architect Client Location MYS ARCHITECTS DANYA CEBUS ROMANA SRL ROMANIA, BUCHAREST









M.Y.S. Architects designed the Cotroceni Park Shopping center, a new multi-story shopping and entertainment complex in Bucharest. The atrium, designed to be the main attraction and spatial focal point of the mall, is an indoor space with a large frame skylight enclosure designed to give full view at a maximum height of 27 meters. Since Romania suffers from frequent earthquakes, the reinforced concrete grid structure was intentionally designed to look majestic.

The steel structure of the roof was designed with the ability to move horizontally on sliding Teflon support plates. The maximum height allowed by the Romanian government is 25 meters. The 53 meters span was shortened to 46 meters at the central crown, a strong and dense supporting tubular canopy, fixed to the reinforced concrete by large guying elements. The heavily loaded crown supports the 20 flat, radial trusses in the center of the roof while the semi-circular perimeter supports the free, sliding footings of the trusses.