

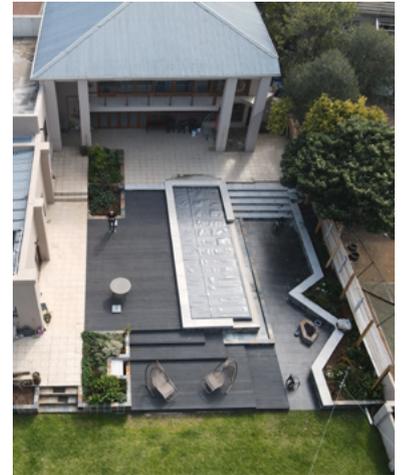
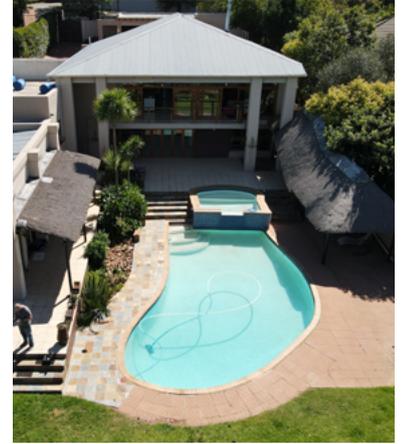


rainwater harvesting/residential pool, johannesburg, sa

This project is located in the Johannesburg's Observatory area. The outdated backyard with a large, old swimming pool and the narrow, dysfunctional patio had to be modernized.

The following were the key objectives for the new design:

- reduce the size of the pool from  $\pm 120,000$  to  $\pm 50,000$  liters
- redesign the backyard to provide a large, usable space for family gatherings
- increased privacy of the yard
- introduce rainwater harvesting measures allowing for collecting the runoff from the large roof and the hard landscape area. Water will be used for topping-up the pool and for the new irrigation system for the garden
- add outdoor fire pit and braai (BBQ) area
- link the adjacent cottage building with the pool area



LASquare redesigned the backyard and assisted during the construction process. The existing pool has been rebuilt into two vital components: a new 3m x 11m swimming pool and a large, underground water storage that can harvest up to  $\pm 75,000$  liters of rainwater.

The new, rectangular pool is partially located inside the old structure and includes:

- a shallow ( $\pm 0.5$ m) area for the kids
- a deeper ( $\pm 1.8$ m to 3m) swimming area, which is protected with an underwater net
- an 'infinity edge' section with a catchment that doubles as a wading area for small kids
- colour LED underwater lights and rope-lighting at the outside perimeter of the pool

The water storage area is divided into two sections. The larger chamber collects rainwater that is partially filtered via the gravel sump. From this chamber water goes through a sand filter and is collected in the second, smaller section. The double-filtered water is then used for the irrigation and the pool. Both underground, concrete tanks are covered with a new decking that is built from the composite material. A section of the decking can be open to access both the tanks. A small water feature in the adjacent planter allows for monitoring the quality of the stored water. The gas fireplace eliminates the risk of ashes contaminating the pool. The raised planter edge provides ample sitting opportunity adjacent to the colorful vegetation.

