



# Institute of Engineering & Management

Salt lake Electronics Complex, Kolkata - 700 091, WB, India

## Rain Water Harvesting at Institute of Engineering & Management, Salt Lake, Kolkata

Population is expanding and so is the utilization of one of its most essential asset i.e., Water. Following the scarcity of ground water across different regions of the globe, Institute of Engineering & Management, Salt Lake, Kolkata has initiated their first step towards preserving water by adopting the technique of collection and storage of rainwater in reservoirs and reusing it onsite.

- ☐ **Rain Water Harvesting in IEM:** Rain water harvesting is the technique of accumulating and collecting rainwater and storing it in the right way for future use.

Institute of Engineering & Management have installed rain water harvesting systems in D1 campus and Gurukul campus of the Institute by constructing underground reservoirs with specifications of 25 ft depth and 3ft width. It has a capacity of storing approx. 5,004 liters of water.

We have 6 tanks around the building which is sufficient to store the rainwater which we further use for various purposes. The tank is chlorinated from time to time.





***Duration:*** It takes about 4-5 hours to get the reservoirs filled during peak monsoon season.

**Uses:** Water stored through this technique can be used for non-drinking purposes like:

- Washing cars
- Watering plants
- Cleaning of floors
- Cleaning toilets

**Benefits of implementing Rain Water Harvesting in IEM**

- The most important benefit is that this system has enabled the Institute to save approx 30% of potable water supplied by Nabadiganta Water Supply Ltd thereby reducing water bills and conserving the precious liquid.

In an era marked by a burgeoning global population and an escalating demand for vital resources, water scarcity has become a pressing issue. Addressing this concern, the Institute of Engineering & Management (IEM) in Salt Lake, Kolkata has embarked on a commendable initiative to preserve water by adopting rainwater harvesting techniques.

Rainwater harvesting is a method that involves the collection and storage of rainwater for future use. IEM has taken significant strides in this direction by implementing rainwater harvesting systems in their D1 campus and Gurukul campus. These systems consist of underground reservoirs with dimensions measuring 25 feet in depth and 3 feet in width, providing a substantial storage capacity of approximately 5,004 liters of water. The Institute has strategically positioned six tanks around the campus buildings to efficiently collect and store rainwater, contributing to the conservation effort.

The harvested rainwater serves various non-drinking purposes, including washing cars, watering plants, cleaning floors, and maintaining hygiene in toilets. To ensure the quality of stored water, the tanks undergo periodic chlorination, emphasizing the Institute's commitment to utilizing rainwater responsibly.

During the peak monsoon season, it takes about 4-5 hours to fill the reservoirs, showcasing the effectiveness of the rainwater harvesting systems in capturing a significant amount of precipitation. This proactive approach aligns with sustainable practices, emphasizing the importance of optimizing natural resources.



The implementation of rainwater harvesting at IEM has yielded numerous benefits. Foremost among these is a remarkable 30% reduction in the dependence on potable water supplied by Nabadiganta Water Supply Ltd. This translates not only to substantial cost savings but also to a considerable reduction in water bills, underscoring the economic advantages of such initiatives. Furthermore, by conserving and efficiently utilizing rainwater, the Institute plays a pivotal role in safeguarding this precious resource for future generations.

In conclusion, IEM's commitment to rainwater harvesting exemplifies its dedication to sustainable practices and environmental stewardship. Through this initiative, the institute not only contributes to the alleviation of water scarcity but also sets a commendable example for institutions and communities worldwide to emulate in the pursuit of responsible water management.

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