Practical experience:

ACO Surface Water Management

2022 Odisha, India



Premium Hotel in Bhubaneswar

Smart Rainwater Harvesting for a Premium Urban Hotel Using ACO StormBrixx

In 2022, a premium hotel development in Bhubaneswar, Odisha, faced a unique challenge in implementing a rainwater harvesting system. Located in a high-density urban area, the site had very limited space between the outer boundary wall and the basement, making traditional rainwater harvesting tanks impractical. Additionally, the original design lacked flexibility and was not optimized for effective infiltration, prompting the need for a more innovative approach. To overcome these constraints, ACO India proposed the StormBrixx SD 900 modular geocellular system, specifically designed for

space-constrained urban infrastructure. A total volume of 200 cubic meters was installed. The modular nature of StormBrixx allowed for quick and efficient installation in narrow and previously unusable areas. The systemwas also integrated with borewell connections to enhance groundwater recharge. To ensure water quality and long-term system efficiency, a hydromechanical separator was installed upstream of the StormBrixx tanks. This pre-filtration unit effectively trapped sediments and debris before water entered the infiltration system.

Advantages

- Space Optimization: Utilized previously unusable narrow areas
- Modular Flexibility: Adapted to site-specific constraints
- Improved Water Quality:
 Pre-filtration ensured long-term system efficiency
- Sustainability: Supported ecofriendly water management and recharge













Installation of ACO StormBrixx SD 900 modules in progress – designed for efficient assembly



This project marked a milestone for ACO India as the first-ever installation of StormBrixx SD in the country. It set a benchmark for future urban developments by demonstrating how smart engineering can deliver sustainable and space-efficient rainwater harvesting solutions.





ACO Products:

■ ACO StormBrixx
□ SD 900

ACO Systems and Solutions Pvt Ltd

Plot No: 113 & 114 Survey No: 89, 90 & 93 Peenya III Phase Industrial Area Bangalore - 560058

Karnataka

Phone: 080 2372 5487

acoindia@acosystems.in

www.aco.in