

BMS in an apartment complex infrastructure automation and management

Central Park, 20km drive from Chennai city is a residential complex developed by Lancor Holdings Limited and having full scope BMS supplied by Sauter Race Technologies Pvt. Ltd, Chennai



If one takes a walk near Central Park on the Old Mahabalipuram road in the evenings today, it is quite an active place. But it was not so two and a half years back. People were reluctant to move to the outskirts without assured security and water supply. Now, 360 apartments have been developed and 100 families have already moved in. The biggest challenge Lancor faced was winning the mind game; convincing the buyers about the security and also convincing the maintenance manager that BMS can indeed bring down cost. "Ultimately, a developer can only install a system. We cannot pay for the upkeep. So we decided to work with Sauter Race to discover the practical method of supply and installation of equipment which do not cost much if applied with human system. We have six security guards manning four and half acres of land with 200 apartments. Another six guards for the same area with 170 apartments. Normally, we would have required more than 30-40 guards in multiple shifts to do the job," says R.V. Shekar, Managing Director, of Lancor.

In the development stage, BMS plays an important role as the complex would not have been fully occupied and the need for security is more pronounced. The access control and surveillance system can dispel the perception that remote places are not safe.

What were the builder's considerations when ordering for a BMS? The first requirement was a control room for the first set of 190 flats. For the second phase there is another control room connected to the master control room. The BMS manages all the equipment/systems – generators, water treatment plants, STP, elevators, bore wells, etc., controls the performances and reports to whomsoever responsible for taking corrective action if need be. Unlike in a complex in the city, here the systems are scattered in eight acres of land. There are 25 bore wells in nine places. STP is placed elsewhere with odour control systems, water treatment plants and generators are far apart and there are 32 lifts; all reporting to one control room.



The success of Building Management System depends on using the required technology to bring down the maintenance cost and provide security to the occupants

There are three different kinds of water supply systems. Pure drinking water is supplied through taps to the kitchens. The pressure of water supply is controlled as per the user's needs. So water is stored in a sump and released as per the user's requirement. The using pattern is recorded but not the quantity. Secondly, the wastewater treated is used for the toilets and for gardening. Thirdly, water supply is for bathing purposes. "Central Park has no municipal water supply at all. Water need is met from bore wells; we also buy water. Both the waters are treated in processing units as per the requirement."

There is 100% back up power supply and the two generators are synchronized to generate just enough power for the actual consumption. The sensors under the BMS evaluate the need.

What is unique in Central Park's automation is its optimum use in infrastructure without losing the human touch. Here, the intelligence system will not tell the residents if the apple in the refrigerator is spoiled or not, but it will tell if someone is stuck in an elevator or if a resident cannot enter his own house. "The idea is that women, children and aged should feel comfortable," says Shekar.

Two years back, the area did not have a blade of grass. Around 550 trees are planted in the periphery and the landscaping is restricted to the centre of the complex. Once fully grown, the trees will counter the effect of CO₂ generated. The water fountains in the centre have lightings in tune with the colour scheme of the buildings. For the building block with white and grey colours, the fountains are lit with white lights.

The project has already received the certification from the Tamil Nadu Pollution Control Board.

In any building complex, installing technology is just an aspect. Ultimately everything depends on how much the individual wants to pay for the maintenance. BMS is as good as people's commitment. People's perception is changing. Even in Central Park, the residents can sense that somewhere along the way something is happening. Without proper access card one cannot enter one's own apartment. When the city goes dark, this complex has lights and the swimming pool does not turn muddy. Or if you drive away in your neighbour's car, you will soon be followed and stopped.

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