Intelligent Elevators

Intelligent technology like smart grouping or destination control allows grouping and assigning passengers in real time based on the selected destination. Smart technologies are also being incorporated in real-time predictive maintenance of elevators. Data from elevators are periodically collected and analysed through a cloud-based analyser algorithm that precisely diagnose the lifetime of components and delivers predictive maintenance messages to the facility team.

Smart Irrigation Controllers

Automated irrigation infrastructure can be integrated with smart controls that captures real time data on the soil moisture and temperature levels and smartly controls the water pump valves. Control systems also has the ability to analyse in ensuring the uniform water distribution takes place. Integrating the smart control systems through internet infrastructure allows information to be distributed to building operators and to alert maintenance companies if any problems occurs. The data captured also allows the building operators to budget and adjust water sources.

Intelligent techniques identified by the project teams to reduce energy and water consumption of building should be seamlessly integrated into the project. Description of each smart system along with its layout and control schematic must be prepared and submitted for DM approvals.

COMPLIANCE DOCUMENTATION

Table 505.02(1): Documents Required

Project Stages	Submittal Documents
Design Permit Application	1. Description about each smart system used to reduce energy and water consumption and improve occupant comfort. 2. Provide the layout / control schematic / calculation (as applicable).
Construction Completion Application	1. Final approved layout / control schematic. 2. Technical data-sheet for the considered smart systems. 3. Delivery notes for the installed smart systems.
After Completion	1. Performance and commissioning report.

REFERENCES AND ADDITIONAL INFORMATION

W. Xu et al., "The Design, Implementation, and Deployment of a Smart Lighting System for Smart Buildings," in IEEE Internet of Things Journal, vol. 6, no. 4, pp. 7266-7281, Aug. 2019.

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