Elevators must also be provided with controls that reduce the energy demand. For non-hydraulic elevators, AC Variable-Voltage and Variable-Frequency (VVVF) drives must be used. This eliminates start/stop disturbance, provides smooth acceleration and deceleration, has excellent speed control and reduces noise levels and wear and tear.

Illumination inside elevator can be achieved through energy efficient LED lamps (fig. 502.03(2)). Lighting control strategy shall be employed to switch off lights when the elevator is inactive for a maximum period of 5 minutes.

Fig. 502.03(2): LED Lightings in Elevator

Though this regulation focuses on some of the energy saving technologies, additional energy saving systems can also be considered when designing the vertical transportation systems. Additional strategies that can be considered to reduce energy consumption in elevators include:

- Incorporate destination dispatch systems for elevators wherein passengers are grouped together for the same destination (fig. 502.03(3)). This significantly reduces user wait-time, increases handling capacity, number of stops and decreases the amount of energy wasted.

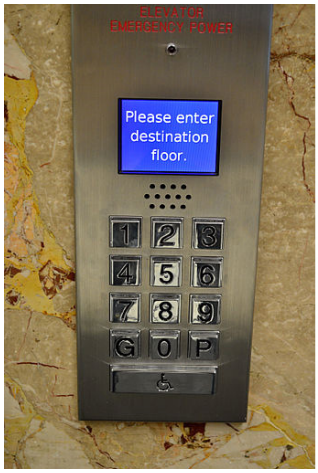

Fig. 502.03(3): Destination Dispatch System for Elevator