

3.9 Smart home system or home automation:

Must follow the below concept and guideline for smart home system or home automation.

The general conception

- It allows managing the system from anywhere and anytime through mobile phone, tablet or computer.
- It makes the daily lives more efficient.
- Control Everything
 - Control lights based on time & occupancy
 - Detect door opening & movement
 - Control remotely air conditioning.
 - Turn on or off lights or a fan.
 - Start the alarm bell when smoke is detected.
 - Control thermostats based on schedules & occupancy!
 - Ensure entry doors are closed & locked remotely
 - Monitor video cameras
 - Automatically shut off water when leaks are detected
 - Receive spoken alerts, announcements & reminders
 - Control energy costs based on usage and projections
 - Ensure garage doors are locked before bedtime!
 - Detect vehicles entering
 - Power off audio & video equipment at night or when not in use!
 - Much more
- Technical requirement

There is no specific need for any cabling structure to be in place, except for the smart home gateway (wired to the router) & the outdoor cameras.

- Few points can be very useful for future Smart connected homes:
 - Extending wireless coverage (Z-Wave): For Villas, electrical sockets to be available near Staircases (both floors) – helpful to pair wireless repeaters for extending coverage from one floor to the other.
 - Network Sockets for Outdoor Cameras or Wi-Fi AP: Points for network (RJ45-) sockets (Weatherproof) to be available on the Rooftop and at least 2 corners of the boundary walls, which may need to be monitored.
 - Electrical Sockets for Outdoor Cameras or Wi-Fi AP: Points for Electrical sockets (Weatherproof) to be available on the Rooftop and at least 2 corners of the boundary walls, which may need to be monitored.
 - Network Sockets near the TV in living room: At least 3 network points to be available for having connectivity for STB, Smart TV, Media Server/NVR.
 - Socket Outside for Power Meter, Parking