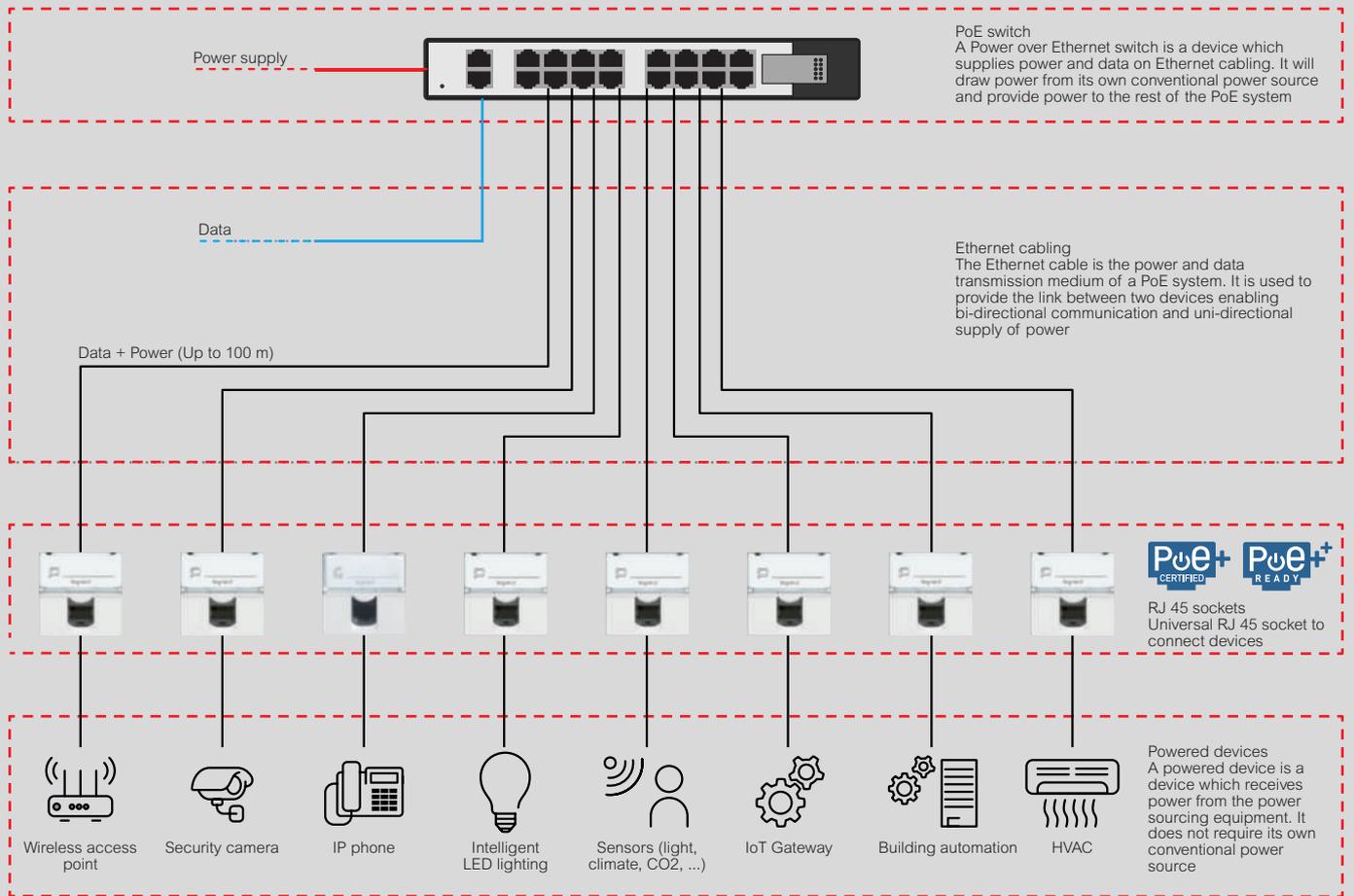


Legrand cabling system LCS³

PoE architecture

Building systems are moving to a single IP Network



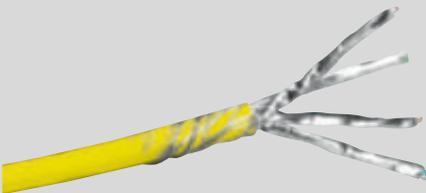
Cabling

Cabling must support enough power throughput and efficiency in addition to the heat dissipation capabilities

Category 6A cabling:

To improve thermal performance and energy efficiency while minimising the cost of moves, additions, changes and upgrades

We recommend running Category 6A cabling to each powered device, preferably using a zone cabling architecture



Connectivity

Connectivity must be robust, durable and provide power headroom for current carrying capacity

Arcing is inevitable with PoE systems, but Legrand's connectivity locates the last point of contact away from the mated connection, protecting the critical area from spark gap erosion. 50 microinch gold plating of the full mated surfaces and maximum contact area in the full mated position extend the life and performance of the connection

In addition, the connector should have a minimum current carrying capacity of paired traces for structured cabling of 1 amp

Legrand's connectivity provides up to an additional amp of headroom for superior performance



Reliability testing

If connectors are unplugged under load, an inductive current is created within the connector that may spark at one or more contact surfaces, causing the surfaces to corrode

It is recommended that connecting hardware be qualified to support PoE and four-pair PoE applications by using the test schedules in IEC 60512-99-001 (PoE and PoE+) and IEC 60512-99-002 (PoE++)

