Focusing on Access Control in the United Kingdom

With UL 293 comes a dedicated standard for access control systems

Security is a top area of focus for designers, contractors, and managers of commercial and multi-unit residential buildings. Understanding the proper security certification required for a given region is critical for market access and continued success. By demonstrating proper compliance, manufacturers can build trust and offer peace of mind.

The first line of electronic security is typically a building's access control system and the UL 294 Standard has been helping ensure proper functionality of these systems for years. When the United Kingdom (UK) Police Authorities sought to improve its dedicated focus on electronic building security through the Secured By Design (SBD) initiative, it turned to UL to create a custom solution.

UL 293 - A Dedicated UK Safety Standard

Through collaboration with SBD, UL 293, Outline of Investigation for Access Control System Units Intended for Use in the UK was developed to cover England, Scotland, Wales, and Northern Ireland. Testing to the new standard must be completed by an authorized test lab and UL is the first test lab to offer such service.

The "Secured by Design HOMES 2016" (published 2016) specifically references UL 293, which provides reliable, region specific industry guidelines.

A Closer Look at Requirements

UL 293 is a performance only document that covers:

- **Attack Resistance** in accordance with BS EN 1627/1630, Resistance Class 2 (RC2)

- **Water Spray**, for outdoor applications, as part of the required ingress tests to IEC 60529

- **Trouble Conditions** for both "door forced" and "door held open" along with the annunciation of loss of primary power to indicate the equipment is operating on standby power

- **Use of Industry Defacto Protocols** such as Wiegand and Open Supervised Device Protocol (OSDP) formats, which can offer reduced interface testing

- **Supply-line Transients** in accordance to IEC 61000-4-12 (IEEE C62.41 is an alternate)

- **Input/Output (low voltage) Field Wiring Transients** in accordance to IEC 61000-4-5 (UL 294 Input / Output circuit transient test is an alternate)

- **Variable Ambient Temperature** that better reflects typical environmental conditions in the UK

Encrypted communication and line security requirements are also detailed in the standard, but software cybersecurity is considered a separate focus area. As an ever-evolving challenge, cybersecurity can be evaluated separately through the UL Cybersecurity Assurance Program via the UL 2900 series of standards.

Certification to UL 293 is required in the UK and helps demonstrate the performance of an access control system.

To learn more, visit UL.com/accesscontrolUK or contact EU.BuildingLifeSafety@ul.com