

Access Control

Designing, manufacturing and installing
quality access control systems



Access Control

Access control provides the ability to control, monitor and restrict the movement of people, assets or vehicles, in, out and around a building or site and is essential for all businesses.

Depending on an organisation's needs, access control can be expanded from controlling a single entrance door, to a large integrated security network. British Security Industry Association members can provide effective, cost efficient and innovative access control security solutions for any organisation's needs.

Access control systems are all designed to allow access only to people with the necessary authority. In the main, they comprise three component parts:

• The physical barrier

A variety of different mechanisms can be used to physically restrict access to a building or location. Typically this would include a door with a magnetic release that opens when a person is authorised. However, whilst the door is open any number of people may pass, so additional control methods may be employed to ensure access is limited to one person per authorisation. These may take the form of turnstiles, speedgates or car park barriers.

• The door controller and reader

The physical barrier is electronically controlled by the combination of a door controller and a badge/token reader. These contain the electronics necessary to identify and authorise the entry of an individual. Door controllers may be 'stand-alone' or connected to a controlling computer network. PC-based systems are able to upload to the details of the individual door controller badges quickly from a single source. An audit transaction of who went where, when and how can then be downloaded. The reader may include a keypad or biometric device to increase the level of security.

• The badge or token

Simple keypad systems are one option, pre-set with a personal identification number (PIN) which unlocks the door. However, most systems use badges/tokens so that employees, visitors or contractors can gain entry. The badge/token is presented to a reader that is connected to the door controller, which in turn activates the

physical barrier. Historically, badges were swipe based, consisting of bar-codes or magnetic stripes. Modern systems incorporate a silicon chip into the badge/token and use Radio Frequency Identification or Smart Card technology. These offer high immunity from unauthorised duplication and are particularly suitable for high-volume entrances.

Once the three component parts are in place, access control systems can be used with other technologies and in many business applications.

Biometrics

Used in conjunction with a badge/token or on its own, biometric readers compare unique human characteristics, such as fingerprints or iris scans, at the point of access with a previously recorded template. Biometrics provide irrefutable identification of a person.

Visitor management

A paper-based system may be used by the reception staff to identify and monitor visitors. PC and computer network based visitor management systems take the concept a stage further by printing photographic passes, incorporating signatures and biometrics. These systems can also scan a visitor's documents and have detailed analysis and reporting functions.

Time and attendance

These systems use badge/token technology to record employee and contractor hours, process these hours against shift patterns, and analyse this information in real-time to feed transactions through to the company's payroll system.

Automatic Number Plate Recognition

ANPR uses CCTV-style cameras and computer software to identify number plates of vehicles attempting to gain entry to a site and also track vehicle movements around a site. Some systems can also store photographs of the driver and vehicle for subsequent analysis.

Integrated security systems

It is now possible to fully integrate access control with CCTV, intruder alarm, fire detection and building management systems. One way to attain this is by adopting the use of Internet Protocol (IP) technology that allows these systems to 'talk' to each other and maximise their effectiveness. Access control systems such as barrier control, time and attendance and visitor management systems can all benefit from being part of a single IP network.

The work of the section

Access control products are subject to fast-moving technological development. BSIA members work to raise awareness of the different types of equipment that are available and the most appropriate environments for using them. In addition to continually producing and updating guidance material, the section endeavours to provide training and qualification initiatives for installers on skills relating to IT, locking systems and electro-magnetic compatibility.

The section is heavily involved in the development of standards at both national and European level, as well as providing guidance on key issues such as compliance with the Disability Discrimination Act. Finally, it works to promote the services of its members, and the importance of using the products and services of quality companies. For more information, visit www.bsia.co.uk/accesscontrol

Case studies

- **Turnstiles** – One BSIA member worked with Microsoft to install a state-of-the-art speedgate system that uses infrared technology to monitor every individual entering and leaving the building, with fast-acting barriers physically deterring unauthorised access.
- **Smart Cards** – Guildhall School of Music and Drama worked with a BSIA member to put together a Smart Card system which provides access to designated areas, acts as a discount card for the in-house cafeteria and as a library card, and can be also used for cashless photocopying.
- **Time and attendance** – Another BSIA member installed a combined access control and time and attendance system to an Imperial Tobacco site. The system checks an employee's badge against their security access patterns, only allowing authorised personnel access. It then automatically generates a time and attendance transaction which is fed through to the attendance monitoring system.

For further detail on the case studies above and more, visit www.bsia.co.uk/accesscontrol or **call now** on 0845 389 3889 to source the services of a BSIA member.

Why choose a BSIA member?

Choosing a BSIA member to provide your security needs gives you peace of mind. Below are just some of the reasons why you could benefit from using the services of a BSIA member:

Quality companies

The BSIA is the only trade association that requires its members to be independently inspected to the quality standard ISO 9001:2000 with a UKAS accredited certification body. This provides independent assurance that a company is run consistently. The inspection also includes confirmation of compliance to relevant British and European standards and/or BSIA codes of practice.

High standards

BSIA members are the top UK security businesses and at the cutting edge of standards development in the UK and Europe. Each year BSIA develops a number of its own Codes of practice, which often go forward to be developed into British Standards. Customers can be confident that the products and services of a BSIA member reflect the latest industry standards.

Up-to-date on key legislation

Members of the BSIA are kept up-to-date on the latest changes in the law. Therefore, you can rest assured that BSIA members are aware of the latest legislative developments and how they affect their business and yours.

Professional

Best practice is second nature to BSIA members. As an Association we are striving to increase professionalism within the industry. Our members train their employees to be current with the latest industry developments.

Fostering long-term relationships

We are aware of the importance of long-term business relationships. That is why we look into our members' financial records before they are admitted into membership to ensure that they are financially sound. We also vet the directors of our member companies. Vetting of all employees is a prerequisite for membership where it is relevant to the services provided. These key factors mean that our members' customers can rest-easy in the knowledge they are able to build long-term relationships with their security suppliers.

