

# An overview of mechanical lock and security related standards and why they're important to the Insurance Industry



In order to minimise risk it's essential for Insurers to be able to recommend the fitting of appropriate security devices to their customers. Whilst obviously not being able to recommend specific products, the ability to recommend standards, both for the products themselves and the people specifying and fitting them is vital.

This booklet has been created to provide you with some brief information on the standards that relate to physical security products and the applications they relate to. When it comes to the specification and fitting then we highly recommend the use of professional, vetted, inspected and qualified locksmiths. With the plethora of different standards out there, and vast array of products and sizes, it's vital that professional advice is sought and we'd suggest using an MLA licensed locksmith for these purposes. Details on MLA licensed locksmiths can be found at [www.locksmiths.co.uk](http://www.locksmiths.co.uk)

As the main trade association for the locksmithing industry, the MLA has high standards for its approved companies which include vetting (the MLA actually changed the law on the vetting of locksmiths a couple of years ago and is now able to perform standard level CRB checks on members), regular inspections (to ensure the companies work is up to standard, insurances are in place, quality systems and audit trails are in place etc) and require the company to employ the services of an exam qualified locksmith.

There are 2 main pieces of advice for insurers:-

Firstly don't rely in simply requiring a British Standard 5 lever mortice lock to be fitted. Whilst a 5 lever mortice dead (or sash) lock that meets the requirements of BS3621 is certainly the correct option to specify for a wooden door, it cannot be fitted to a UPVC door, aluminium door and often can't be fitted to a composite door. We are currently working with the RISC Authority on guidelines for insurers but in advance of these being published we'd recommend that the customer is asked what type of door they have and then specify the lock accordingly (e.g. 5 lever BS3621 lock for a wooden door, or a multipoint locking system security by a SS312 Diamond or 3 star Kitemarked cylinder if UPVC). More details on the standards and their specific applications follow in this booklet and if in doubt then we'd suggest you recommend your customers contact an MLA licensed locksmith.

The other relates to a particular hot topic of the moment which is the issue of Cylinder Snapping. This method of attack that can enable burglars to enter a property protected by locks operated by eurocylinders in seconds, is particularly prevalent in West Yorkshire (where 25% of all burglaries are being committed using this technique). The method involves breaking the cylinder (in some instances breaking the handles to get better access to the cylinder) and then manipulating the lock to gain entry. It can be done using basic tools and with very little "practice" and is therefore a serious security risk. Whilst properly specified (i.e. correct size) and fitted cylinders will help (see note below), in order to maximise protection against this specific type of attack it is vital to stipulate that a cylinder that meets the SS312 Diamond level, or a 3 Star Kitemarked cylinder be fitted. (There is also the option of a 1 Star Kitemarked Cylinder and 2 Star Kitemarked door hardware too). There has (unfortunately) been a lot of promotion about this (and it can readily be found on YouTube and the likes) so the threat is starting to move to other areas of the UK and indeed we are starting to get reports from members who are attending burglaries committed using this method across the UK.

Of course whilst the use of products that meet the relevant standards (and have been accredited to them by 3<sup>rd</sup> Party Test Houses is very important, there is also the issue of correctly specifying and fitting the cylinder.

The picture below to the left shows a cylinder that has been specified and fitted correctly – it is of the correct length and doesn't protrude more than 3mm from the handle. The cylinder on the right hand side however has been specified incorrectly (is far too long) and leaves the property vulnerable. [It's also useful to note that despite what the person fitting may say – this is not a "special feature" to assist users to feel where to put the key in the dark! A professional locksmith will be able to specify, supply and fit the correct cylinder!



Example of a correctly fitted cylinder



Example of a badly fitted cylinder

## Lock related standards overview

At any given time there are approximately 30,000 standards within the UK and many more European standards being used covering a wide range of products and services. Standards are under constant review to make sure they are relevant and do not contradict each other. Standards provide the test criteria for independent test houses (such as Sold Secure) to accredit products and confirm they have been manufactured to a minimum requirement. The following overview is a breakdown of locksmith related standards (not exclusively) that people working within the industry should at least be aware of and ideally know what standards apply and when.

### Standard Number

BS 3621 2007 + A1 2009

Title: Thief Resistant Lock Assembly. Key Egress

The original lock standard first drafted in the 1960's and still the base for all of the lock standards that are cross referenced in it. 3621 was intended for 5 lever mortice locks fitted to wooden doors and is intended to be used on domestic properties. The key-key application of this locking device makes it unsuitable for properties with single exits. The latest version was amended in late 2009 to satisfy legal issues within the wording of the document. The UK was able to retain the following BS standards because of the GVA that was not included in BS EN 12209 and BS EN 1303 however BS 3621 was brought into line with 12209 and 1303 in 2004.

## BS 8621 2007 + A1 2009

### Title: Thief Resistant Lock Assembly. Keyless Egress

Introduced in 2004, 8621 has the same test criteria as 3621 but is intended for use on locking devices that require no key to achieve egress. Single exit and multiple occupancy dwellings require keyless egress as per fire regulations. The 2009 amendments were as per 3621.

## BS 10621 2007 +A1 2009

### Title: Thief Resistant Lock Assembly. Dual Mode

Introduced in 2007, 10621 also has the same test criteria as 3621 and is a hybrid of the two previous standards. 10621 locks should not be used in single exit dwellings because of the entrapment possibilities. Amendments made in 3621 and 8621 in 2009 are mirrored here.

## PAS 24 2007 + A1 2009

### Title: Enhanced Security Performance Requirements for Door Assemblies.

Adapted with input from Secure by Design, PAS 24 is intended to provide the minimum requirements for whole door sets in new build dwellings. PAS 24 takes into consideration all aspects of a door including fixings and hinges etc. The lock requirements cross reference to 3621, 8621 etc. PAS 24 is being rewritten to include BS 7950 early in 2012.

## TS 621 2011

### Title: Thief Resistant Electromechanically Operated Lock Assemblies

A technical specification that describes performance requirements for single or multipoint thief resistant electromechanical lock assemblies including the lock interface, striking plate, fixing screws, fitting instructions and where appropriate, cylinders and protective furniture.

## BS EN 12209 2003

### Title: Building Hardware- Locks and Latches-Mechanically Operated Locks, Latches and Locking Plates-Requirements and Test Methods

This European standard covers requirements and test methods for all types of mechanical lock or latch (including associated or separately supplied locking plates), intended for use on pedestrian doors in buildings but excludes electro-mechanically operated locks and striking plates, multi-point locks and their locking plates, locks for windows, padlocks, locks for safes, furniture locks and prison locks. This standard is in harmony with the \*621 series of standards apart from the GVA that is unique to the UK.

## BS EN 1303 2005

### Title: Cylinders for Locks-Requirements and Test Methods

This European standard introduced in 2005 is for cylinders only. The test methods are in line with the \*621 series of standards except for the GVA.

## PAS 3621:2011

### Title: Multipoint locking assemblies - Keyed egress

A family of standards that mirrors BS 3621 but for multipoint locks.

## PAS 8621:2011

### Title: Multipoint locking assemblies - Keyless egress

## PAS 10621: 2011

### Title: Multipoint locking assemblies - Dual mode egress

## TS 007: 2011

### Title: Enhanced security performance requirements for replacement cylinders and or associated security furniture

A DHF technical specification that tests for security of cylinders or a combination of security handles and cylinders together. A star rated system that needs three stars for the minimum requirement can be achieved with either a three star rated cylinder or a one star rated cylinder and two star rated handle.

## BS EN 1125:2008

### Title: Building Hardware. Panic Exit Devices Operated by a Horizontal Bar, for use on Escape Routes. Requirements and Test Methods

Experience relating to escape from buildings and general safety have made it desirable that doors at exits in public buildings, places of entertainment, shops etc., should be fitted with panic devices operated by a horizontal bar. The emphasis for products covered by this standard is on safe exit rather than security.

## BS EN 179: 2008

Title: Building Hardware. Emergency Exit Devices Operated by a Lever Handle or Push Pad, for use on Escape Routes. Requirements and Test Methods

This standard covers devices to be used in emergency situations where people are familiar with the emergency exit and its hardware and therefore a panic situation is most unlikely to develop. Lever handle operated escape mortice locks or push pads may therefore be used.

## BS EN 12320: 2001

Title: Building Hardware, Padlocks and Padlock Fittings.

This European standard specifies performance requirements and describes test methods for strength, security, functions and corrosion of padlocks and padlock fittings used in building applications, but excluding cables and chains.

Requirements which relate to security are classified in six grades, based on performance tests that simulate attack. Human intervention, durability, manipulation and picking tests are not included in this standard.

## BS EN 1627 – 1630: 2011

Pedestrian doorsets, windows, curtain walling, grilles and shutters. Burglar resistance.

## **Sold Secure**

Sold Secure is an independent test house that has its own test specifications based on the standards listed (sometimes using several standards in one specification). Sold Secure has 40+ specifications that are constantly reviewed by industry stakeholders and is recognised by Police groups (ACPO), Insurers and other test houses. Some of the locksmith related specifications include:

SS 301 – Specification for Mechanical Security Systems for Domestic Buildings

SS 304 – Specification for Domestic Safes

SS 306 – Specification for Mechanical, Domestic Door and Window Security Systems

SS 308 – Specification for Mechanical, Commercial Doors and Window Security Systems

## SS 312 – Specification for Cylinders for Locks

Including the new Diamond level that tests cylinders against snapping. Secure by Design recommend SS 312 Diamond cylinders. SS 312 is a stand-alone cylinder test that improves security just by changing the cylinder.

## SS 314 – Specification for Security Cabinets

### **Locksmith related standards in development (titles and numbers to be confirmed)**

pr EN 15865 – Building Hardware – Requirements and Test Methods – Multipoint Locks, Latches and Locking Plates

For further information please contact either of the following:-



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# Licensing the Professional Locksmith

The Master Locksmiths Association (MLA) is the leading Trade Association for the locksmithing industry.



In the absence of Government based licensing (meaning that anyone can call themselves a locksmith), the MLA can provide you with peace of mind through it's licensing scheme.

MLA licensed locksmith companies, who undergo strict vetting (including criminal record checks, regular inspections to ensure quality etc), are able to provide advice based on knowledge and experience, recommend products that are fit for purpose as well as provide professional installation and maintenance services.

**The key to your security needs.**

Find your nearest MLA approved locksmith by contacting the Association:

Tel: **0800 783 1498** · Fax: **01327 262539**

Web: **[www.locksmiths.co.uk](http://www.locksmiths.co.uk)**

E-mail: **[enquiries@locksmiths.co.uk](mailto:enquiries@locksmiths.co.uk)**