Meeting the new TS 007 security standard for replacement lock cylinders and protective door furniture - a guide for security and building professionals, installers and locksmiths

Guidance from the Door & Hardware Federation and the Glass & Glazing Federation on how to specify the correct TS 007-rated Kitemark cylinders and protective handles or hardware
Why the new standard?
The Technical Specification TS 007:2011 is the industry response to the growing concerns that an increasing number of premises are under threat from burglars who learn lock attack techniques on the internet. In particular, locks and protective door furniture that meet the standard offer protection against snapping, bumping and other forms of cylinder attack.

TS 007 is aimed at the retrofit market. It is designed to offer comparable levels of cylinder security to that already found in complete door assemblies rated to PAS 24 and complete lock assemblies rated to BS and PAS 3621/8621/10621 and DHF TS 621.

The new TS 007 standard is characterised by the use of a star rating and the use of a third party certification mark, typically the widely recognised Kitemark. The star rating will be imprinted on compliant cylinders and door furniture, and also on the packaging in which those performance hardware items are sold. The cylinder, or combination of cylinder and security furniture, must have an accumulative three stars to meet the minimum security requirements.

What does the standard cover?
TS 007 provides a “mix and match” approach to retrofitting security devices on doors. The interchangeability of cylinders and security hardware gives the installer and qualified locksmith a flexible way to achieving the three star rating. The standard sets strict levels of performance but does not prescribe how the door manufacturer or security installer achieves the standard. It can be achieved by uprating the cylinder alone, or by utilising a combination of an uprated cylinder and strengthened security door furniture.

Meeting the standard
There are two alternative ways to achieve the necessary three star rating under TS 007:

<table>
<thead>
<tr>
<th>1 star cylinder + 2 star security hardware</th>
<th>3 star cylinder</th>
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<tr>
<td>= 3 stars ★★★</td>
<td>= 3 stars ★★★</td>
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1 star rating
★

For a cylinder to achieve this rating it must meet the cylinder security requirements of BS 3621:2007 and meet certain minimum requirements of BS EN 1303:2005. Refer to the TS 007 standard for full information.

2 star rating
★★

For security hardware to receive a two star rating, the protection offered by the hardware to the cylinder is tested in a manner equivalent to the PAS 24 cylinder test. In addition, where possible, the hardware’s durability and corrosion resistance are tested in accordance with the European handle standard EN 1906:2010.

3 star rating
★★★

For a cylinder to receive three stars, it must meet the requirements of a one star cylinder and also withstand an attack similar to the PAS 24 cylinder test without the benefit of any protective hardware.
How to recognise high security cylinders and door handles

Look for the following markings on the products:

**Claimed star rating**

**Third party certification mark, typically the Kitemark**

For cylinders, these markings will typically be visible when the cylinder is removed from the lock. For security hardware, the markings will typically be visible when the furniture has been removed from the door leaf.

**Who is supporting the new standard?**

TS 007 has been produced by the Door & Hardware Federation and the Glass & Glazing Federation. The UK’s leading lock makers and door manufacturers, together with police security professionals and the insurance sector, are supporting the new standard. Supporters include:

- Association of Building Engineers
- Association of Chief Police Officers/Crime Prevention Initiatives/Secured by Design
- Association of Composite Door Manufacturers
- British Research Establishment
- British Standards Institute
- Council for Aluminium in Buildings
- Exova Warrington
- Guild of Architectural Ironmongers
- National House-Building Council
- RISCAuthority (representing UK insurers regarding security risk mitigation measures)
- White Technology & Engineering

**Third party certification**

The DHF, GGF and Secured by Design strongly recommends that manufacturers of TS 007-rated cylinders and security door handles or hardware carry out third party certification of every product claiming compliance with this specification. This is especially important because the TS 007 specification employs human testing, and certification ensures that this gives - as far as is reasonably practicable - consistent and reproducible results. BSI offers third party certification against TS 007 using its market-leading Kitemark brand which has wide consumer and police recognition and acceptance. In this case, the TS 007 star rating is displayed alongside the familiar Kitemark logo on both products and packaging. (Other certification bodies may offer similar schemes.)
The Door & Hardware Federation

This guide has been produced by the Building Hardware Group of the Door & Hardware Federation (DHF). The DHF represents all the key players in industrial, commercial and garage doors and gates, as well as the leading UK manufacturers and suppliers of building hardware, locks and architectural ironmongery.

With the ultimate aim of maintaining and raising quality standards throughout the industry, all DHF members must meet minimum standards of competence and customer service. They all operate within a Code of Conduct governing standards of workmanship, quality assurance, training, safety, business integrity and CE marking compliance.

The DHF provides professionals in all sectors of the building industry with a single source for technical expertise.

The Glass & Glazing Federation

The Glass & Glazing Federation (GGF) is the trade association representing companies who make, supply or fit, glass and glazing related products. It is the primary representative organisation for companies involved in all aspects of the manufacture of flat glass and products and services for all types of glazing, in commercial and domestic sectors.

Secured by Design

Secured by Design is the official UK Police flagship initiative supporting the principles of ‘designing out crime.’ Secured by Design focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. For Secured by Design purposes independent third party certification to TS 007 will always be required. For more information please visit our website at www.securedbydesign.com.