

BS EN 1906:2012 is the European standard covering the performance requirements and test methods (i.e. durability, static strength, operating torque, corrosion, safety, etc.) for sprung and unsprung lever handles and knobs for doors on backplates or roses. It applies only to lever handles and knobs that operate a lock or latch. The standard has 4 grades of performance. Compliance with the standard ensures a margin of strength in excess of that needed for normal operation. The standard has additional graded safety requirements where a high risk of failing exists.

## Digit 5 - Safety

Grade 0: Normal use

Grade 1: Safety application – to qualify for this grade, handles must have high strength handle to plate and plate to door fixing, and/or handle to spindle fixing, such that they would withstand a person grabbing in order to prevent falling.

## Digit 1 - Category of Use

Grade 1: Medium frequency of use with a high incentive to exercise care and small chance of misuse.

Grade 2: Medium frequency of use with some incentive to exercise care but there is some chance of misuse.

Grade 3: High frequency of use by public or others with little incentive to exercise care and with a high chance of misuse.

Grade 4: High frequency of use on doors which are subject to frequent violent use.

## Digit 6 - Corrosion Resistance

Grade 0: No defined corrosion resistance

Grade 1: Mild resistance – minimum requirement for internal use.

Grade 2: Moderate resistance.

Grade 3: High resistance – minimum resistance for external use.

Grade 4: Very high resistance- recommended for use in exposed marine atmospheres or very polluted industrial environments.

Note: Products intended to develop a natural patina (bronze or brass) are not required to comply with any requirements.

<b>4</b>	<b>7</b>	<b>-</b>	<b>B</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>B</b>
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## Digit 2 - Durability

Grade 6:

Medium use – 100,000 cycles

Grade 7:

High use – 200,000 cycles

## Digit 3 - Test Door Mass

No requirement

## Digit 4 - Fire Resistance

Grade 0: No performance determined.

Grade A: For use on smoke control doors.

Grade A1: For use on smoke control doors, tested with 200,000 cycles on a test door.

Grade B: For use on smoke control and fire resistant doors.

Grade B1: For use on smoke control and fire resistant doors, tested with 200,000 cycles on a test door.

Grade C: For use on smoke control and fire resistant doors with requirements for fire protection inlays in backplate, rose and escutcheon.

Grade C1: For use on smoke control and fire resistant doors with requirements for fire protection inlays in backplate, rose and escutcheon, tested with 200,000 cycles on a test door.

Note: Grades B or C means that the furniture has been included in at least one fire/smoke door test. This is not an indication that the furniture can be used on any fire/smoke door.

## Digit 7 - Security

Grade 0: Not approved for use on burglary resistant doors.

Grade 1: Mild burglary resistance.

Grade 2: Moderate burglary resistance.

Grade 3: High burglary resistance.

Grade 4: Extra high burglary resistance.

Note: The main requirements include drilling, close fitting plates or escutcheons to help protect the lock and support the cylinder.

They must be resistant to removal from the outside of the door and make provision to minimise the cylinder protection to a minimum of 3mm. Full details can be found within BS EN 1906.

## Digit 8 - Type of operation

Type A: Spring assisted furniture

Type B: Spring loaded furniture

Type U: Un-sprung furniture