

# BS EN 1906 Lever Handles & Knob Furniture

## BS EN 1906 classifies door furniture by using an 8 digit coding system.

A similar classification applies to all building hardware product standards so that complementary items of hardware can be specified to, for instance, a common level of corrosion resistance, category of use, etc. Each digit refers to a particular feature of the product measured against the standards performance requirements.

### Digit 1 – Category of use

Four grades are identified:

- Grade 1: medium frequency of use with a high incentive to exercise care and a small chance of misuse, e.g. internal residential doors;
- Grade 2: medium frequency of use by people with some incentive to exercise care but where there is some chance of misuse, e.g. internal office doors;
- Grade 3: high frequency of use by public or others with little incentive to exercise care and with a high chance of misuse, e.g. public office doors;
- Grade 4: high frequency of use on doors which are subject to frequent violent use, e.g. football stadiums, oil rigs, barracks, public toilets, etc.

### Digit 2 – Durability

Two grades of durability are identified:

- Grade 6: medium use – 100 000 cycles;
- Grade 7: high use – 200 000 cycles.

### Digit 3 – Test door mass

No classification.

### Digit 4 – Fire resistance

Four grades of fire resistance are identified:

- Grade 0: no performance determined
- Grade A: for use on smoke door assemblies
- Grade B: for use on smoke control and fire resistance door assemblies
- Grade C: for use on smoke control and fire resistance door assemblies with requirement for special core in the handle/knob

### Digit 5 – Safety

Two grades of safety are identified:

- Grade 0: normal use
- Grade 1: safety application - example handles must have high strength handle-to-plate and plate-to-door fixing such that they would withstand a person grabbing in order to prevent falling

### Digit 6 – Corrosion resistance

Five grades are identified according to EN 1670:

- Grade 0: no defined corrosion resistance
- Grade 1: mild resistance - minimum requirement for internal use
- Grade 2: moderate resistance
- Grade 3: high resistance - minimum requirement for external use
- Grade 4: very high resistance - recommended for use in exposed marine atmospheres or very polluted industrial environments.
- Grade 5: exceptionally high corrosion resistance recommended for use in exceptionally severe conditions where long-term protection of the product is required.

### Digit 7 – Security

Five grades are identified:

- 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 resistance to drilling, close fitting plates or escutcheons to help protect the lock and support the cylinder.

### Digit 8 – Type of operation

Three operation types are identified:

- Type A: spring assisted furniture
- Type B: spring loaded furniture
- Type U: unsprung furniture