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Lever Handles Standards and Certification.

BS EN1906 Lever handles and 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 standard's performance requirements.

1 **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.

2 **Digit 2 – Durability**
Two grades of durability are identified:
- grade 6: medium use - 100 000 cycles
- grade 7: high use - 200 000 cycles

The tests undertaken to achieve these grades involve the application of additional forces to the door furniture in order to simulate the conditions of use likely to be experienced in the field.

3 **Digit 3 – Test door mass**
No requirement

4 **Digit 4 – Fire resistance**
Two grades of fire resistance are identified:
- grade 0: not approved for use on fire/smoke door assemblies
- grade 1: suitable for use on fire/smoke door assemblies.

Note: A Grade 1 classification means only that the furniture has been designed for use on fire/smoke control doors; the actual fire performance achieved (e.g. fire integrity of 30 minutes on a partially glazed timber door etc.) will be contained in a separate fire test report.

5 **Digit 5 – Safety**
Two grades of safety are identified:
- 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. It is recommended that only safety furniture is used at the top of cellar steps or other staircases.

6

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.

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

7

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

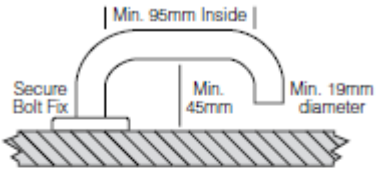
Note: The main requirements include resistance to drilling, close fitting plates or escutcheons to help protect the lock and support the cylinder. They must be resistant to removal from the outside of the door and make provision to minimise the cylinder projection to a maximum of 3mm. Full details of the requirements can be found in BS EN 1906.

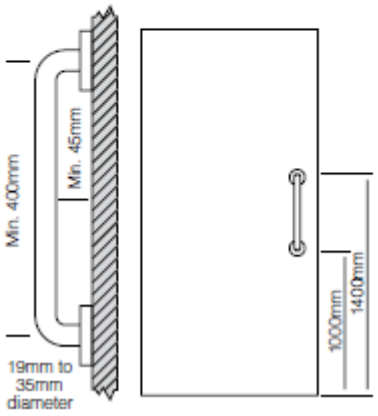
8

Digit 8 – Type of operation

Three operation types are identified:
- type A: spring assisted furniture
- type B: spring loaded furniture
- type U: unsprung furniture

The Disability Discrimination Act – BS8300 – Document 'M'





The DDA is an Act of Parliament dealing with Human Rights Legislation, making it unlawful to discriminate against anyone on grounds of any disability whether permanent or temporary.

BS8300: 2001 "Design of buildings to meet the needs of disabled people – Code of Practice". This provides guidance on good practice in the design of buildings so that access is convenient for all.

Approved Document "M" (Doc M) of the building regulations (England and Wales), requires "that reasonable provision shall be made for people to gain access to and use the building and its facilities".

Lever Handles

Lever handles should be "of the return to door type". They do not have to be round bar. They should not have sharp edges or immediate changes of direction. They should be securely fixed to door by bolt through fixings and with minimum dimensions as stated in the diagram.

Pull Handles

Pull handles should be bolt fixed to door and have roses to aid the partially sighted. Minimum dimensions are stated in the following diagram. The upper fixing should be a minimum of 1400mm above floor level. Pull handles can be longer but not shorter than these dimensions.

Kick Plates

To prevent damage to doors from wheelchairs, kick plates should be at least 400mm high.

Tonal Contrast

To assist the partially sighted, door furniture should contrast with the door, by a minimum of 20 points. This so called "light reflectance value" is measured on a scale of 0 to 100 with pure black being 0 and pure white 100. Hardware and door manufacturers should be able to give the value (from 0 to 100) of their products.

Cold to the touch

External handles should not be cold to the touch. Nylon, wooded and powder coated handles or handrails will satisfy this, but not metal versions.

Maintenance

If Stainless Steel fittings do show signs of rust, or greasy and oily soiling. They can be removed with a household detergent which the manufacturer states is suitable for Stainless Steel.