

Fixing, Inspection and Maintenance

Hinges

All hinges must be adequate for purpose and must be fitted accurately, so that all hinge pins are in vertical alignment. Most of the hinges in this catalogue (Section 3) are graded according to BS EN 1935: 2002 and if in doubt refer to the main catalogue. Hinges are usually supplied dry by the manufacturers, because of oil spoiling decorative surfaces. Hinges should be lubricated immediately after installation and then periodically, to ensure reduction in wear (the only exceptions are classed as 'maintenance free'). The exception for special situations, i.e.: dusty locations, where a mixture of oil and grit can act as a grinding paste, or public toilet areas, which are subject to hosing down or washing with detergent, which will remove the oil. Such situations require specialist dry film lubricants. Hinges should be checked regularly for wear, loose screws etc. Squeaking hinges are a sign of lack of lubrication, but frequent occurrence is a sign of misalignment, and should be rectified immediately. Failure to fix correctly or maintained inappropriately could invalidate any guarantee supplied by the manufacturer.



Door Closers

All door closers must be adequate for purpose and must be fitted in accordance with the manufacturer's instructions. All the overhead closers in this catalogue are rated according to BS EN 1154/5 and the correct closer for the door must be fitted and adjusted properly. Failure to comply will invalidate the manufacturer's guarantee. At least once a year the closer should be checked for wear, ensuring that the fixing screws are properly secure and any worn component replaced. The moving parts on the link arms should be greased. The closer settings must be checked to ensure smooth operation. Only cleaning agents not containing corrosive and damaging components should be used. It is also recommended that door stops be fitted, where practicable, to all doors with door closers, even if there is a backcheck within the closer.

Floor Springs

The floor spring must be of a type suitable for the door it is to be fitted to, ensuring that there is no strain on the mechanical parts. If in doubt, see details on BS EN 1154/5 in the main catalogue. The spring must be fitted to the manufacturer's instructions and that the pivot centres are perfectly vertical. At least once a year the spring should be checked for correct closing speed, latching action etc. The top centres should be checked and greased. Any damaged item should be replaced. It is also recommended that door stops be fitted, where practicable, to all doors with floor springs, even if there is a backcheck within the floor spring.

Electro -magnetic Closers and Static Devices

Any electrical hold-open device must be checked on a weekly basis.

Locks and Latches

The correct operation of a lock or latch, assuming that it has been fitted correctly, is often affected by movement of the door and/or frame occurring perhaps due to distortion influenced by climatic conditions or wear on hinges or pivots inducing door drop.

The usual effect from these conditions is inability of the latch and deadbolts to easily engage the striking plate or keep, requiring an adjustment to their position on the frame, or an adjustment to the lip of the strike plate to provide a more favourable striking angle may be necessary.

Freedom of operation of the latch action in conjunction with the strike plate or keep is particularly important when the door is fitted with a door closing device and also, of course, on fire doors.

It is important that the holes in the frame behind the strike plates are deep enough (does not apply to strikes with back boxes), and are free from foreign matter, to ensure unrestricted movement of the bolt or bolts.

Lubrication, when required in the context of free latching of a door, need only be applied to the sides and striking face of the latch bolt.

Pin tumbler and disc cylinders should be lubricated with either flake graphite or a PTFE lubricant. See Section 2 page 91

Lever Handles, Knob Furniture and Pull Handles

These should be checked periodically for secure fixing. Many problems occur where the incorrect wood screws are installed and where the material to which the products are fixed is unsuitable. It is also important to check that the lever or knob fully retracts the latch bolt, for safety reasons. Poor operation could be attributed to badly fitted furniture or tracks should be cleared of debris to allow unimpeded travel of the guides or rollers.

Emergency and Panic Exit Hardware

All these products must be fitted according to the manufacturer's instructions and must comply with either BS EN 179 or BS EN 1125. Failure to do this could mean that the device will not be covered by the manufacturer's guarantee or work correctly.

It is vital that all emergency and panic exit devices are inspected and maintained properly to ensure safety is maintained when exiting a building in any situation.

To ensure these devices are functioning correctly, it is recommended that a weekly inspection is made to check for damage, operation and that the keeps are kept free of any obstruction, especially the floor socket. Then every three months, a check should be made to ensure all fixings are secure and that all the units are lubricated where necessary.

Care of Finishes

Because the majority of surface coatings are applied by fairly complex high volume production processes, it is not usually possible to reproduce the finishing conditions outside the factory. This means that repair or reconditioning of a damaged finish is rarely possible, unless the component can be disassembled and returned to the factory for reprocessing on the production line - not a generally practiced proposition. The implication, therefore, for long term durability of a finish is that prevention of unnecessary corrosion is better than attempting a cure.

Atmospheric deposits of dust and grime are the major causes of premature deterioration of the surface coatings because of the wide variety of chemical pollutants in the atmosphere. When such chemicals become damp, they often initiate local attack, generally in the form of pitting on the surface finish. Dampness can rarely be prevented but dust and grime can usually be removed by regular attention such as dusting with a dry cloth or by washing neglected surfaces with clean or soapy water. Little and often should be the rule, avoiding the use of even the mildest abrasives.

The application of wax or silicone polishes can be beneficial because of the barrier layer created between surface finish and atmospheric deposits. **(Acknowledgement to the ABHM)**

Aluminium

Anodised aluminium should be washed periodically with a weak detergent solution and occasionally wiped with wax polish.

Stainless steel

Stainless steel basically requires no looking after. Smudges can be removed with a damp cloth. Regular dusting, occasional washing with warm water, with or without a gentle detergent, and dried with a soft cloth is mostly all that will be required, or secondly mild non-scratching abrasive powders, such as typical household cleaners. These can be used with warm water, bristle brushes, sponges or clean cloths. However, outdoor fittings and those at chlorinated pools etc. can develop what is known as 'flash rust' after a while. This is not generated from within the metal itself and can be removed by vigorous rubbing. Avoid acid or chlorine based cleaning products

Nylon

Nylon is a non-porous material and the smooth surfaces do not attract dust. Appearance can be maintained by wiping with a damp cloth.

Unlacquered brass

Natural unlacquered brass should be polished from time to time with a proprietary brass cleaner, or left to acquire the natural patina of brass.

Lacquered brass

Lacquered finishes should be cleaned by the occasional application of a coating of wax polish. Eventually the lacquer will become damaged and break down. (The time scale will depend on the quality of lacquer applied by the manufacturer). When this occurs all traces of the lacquer should be removed using acetate lacquer remover or water washable paint remover (i.e. Nitromors). The product may then be relacquered or cleaned as unlacquered brass.

Bronze

Bronze finishes should be periodically washed in warm soapy water. They should then be treated with a sparing amount of wax or furniture polish.

Stove enamelled

These finishes should be wiped with a soft cloth

Electro-plated

Electro-plated and electrophoretic finishes should be wiped clean with soapy water and a soft cloth and wiped dry.

Nickel and chrome

Nickel and chrome finishes should be washed periodically with a weak detergent solution and rubbed occasionally with paraffin or light oil on a cloth.

P.V.D. (Physical Vapour Deposition)

P.V.D. should be wiped over with a damp cloth or use a general furniture polish.