

Fact Card 7 – Hardware

Giving you the facts about Hardware

Just like any passive or active fire protection system, it is essential for a fire door to perform its vital task in the event of a fire. A fire door is not just the door leaf. It consists of the frame, any glazing, the intumescent fire and smoke seals and all the ironmongery.

Ironmongery includes all the items that are used on a fire door, such as the hinges, overhead door closers, latches, locks and handles. These components are crucial when making up a fire doorset / assembly.

The Specification of Ironmongery

The fire door will not work in the event of a fire unless all the correct ironmongery has been fitted and maintained. Fire door leaves and ironmongery are often sold separately, meaning they are then bought separately – **this is where the danger lies!**

It is absolutely crucial that when selecting ironmongery that only certificated and compatible ironmongery is selected. Fire doors can only be tested as complete assemblies.

The specific ironmongery may only be reliable and compatible with the particular fire door assembly with which it has been tested. All certificated ironmongery products are then issued with a certificate number.

Every fire door designed and manufactured under the BWF Fire Door Alliance has been independently tested and certificated to demonstrate that, all things being equal, it operates reliably in normal use and in the event of a fire.

Conformity of ironmongery

- Appropriate product conformity marking is required under the Construction Products Regulation (CPR) to confirm that construction products, which are placed on the market within Europe, meet the Essential Requirements set out in the CPR:
 - Mechanical Stability
 - Fire Safety
 - Health & Environmental Safety



- Sound Protection
- Energy Efficiency
- Conformity marking allows a simple route to satisfying the Construction Products Regulation which apply and its requirements in the UK.
- Conformity marked hinges, tested to BS EN 1935, should be used on fire or smoke doors and on all escape routes.
- Conformity marking of door closing devices, electro-magnetic closing devices and door coordinators tested to BS EN 1154/55/58 has been required since 2004.
- Ensure the ironmongery is maintained regularly in accordance with the ironmongery manufacturer's recommendations.
- Details of compatible components are explained in the manufacturer's installation, care & maintenance instructions attached to every door manufactured by members of the BWF Fire Door Alliance.

BWF Fire Door Alliance

- All ironmongery manufacturers within the BWF Fire Door Alliance have had their relevant product ranges tested.
- This is the first step to ensuring you use the correct compatible ironmongery for the fire door design – you must ensure that the ironmongery is certificated.
- Always ensure that you fit the correct compatible components as per the fire door manufacturer's installation instructions.



Maintenance of Ironmongery

All ironmongery needs to be regularly checked. The following checklist provides guidance about what to look out for when inspecting and maintaining fire door ironmongery:

Hinges

Check that there is no visible wear on the hinge. ☐

Any dark marks or stains around the hinge knuckle could indicate wear and impending failure, meaning that the hinges should be replaced as soon as possible. See Figure 1 to show an example of a this. ☐

Door closing devices

Check that the door closing device is operating correctly by:

Open the door fully and check it closes without binding on the floor. ☐

Open the door to approximately 5 degrees and again check that it closes fully, overcoming any latch or seal. Check door

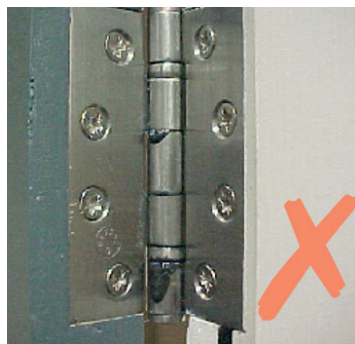


Figure 1.

Disclaimer:

Note: Whilst every effort has been made to ensure the accuracy of advice given, the BWF cannot accept liability for loss or damage arising from the use of the information supplied in this publication.



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closing speed to be approximately 10 seconds from 90 degrees and ensure that the door does not slam. ☐

Adjust speeds as necessary. Electro-magnetic hold-open and swing-free devices ☐

Make sure that any electro-magnetic hold-open device is operating correctly and releases immediately when power is removed. ☐

Locks and lever handles

Check that the levers fully return to the horizontal after use and that the latchbolt is engaging smoothly and completely into the strike. ☐

Wipe any metal dust deposits off the latchbolt and strikeplate. ☐

Adjust, lubricate or replace, as required. ☐

All ironmongery

Make sure that all fixings are secure. ☐

Some hinges, closer arms and locks may require lubrication – Refer to the manufacturer's installation instructions.