

Fire Regulations for Residential Sector

Fire regulations have had a vast impact on the architectural ironmongery used within residential sector in recent years, but does more need to be done to actually enforce this legislation? Wayne Lysaght-Mason, Managing Director of IronmongeryDirect comments.

Architectural ironmongery has always had to adapt to meet with current legislation whether it be the Disability Discrimination Act (DDA) or Fire Regulations. However, with recent disasters such as Lakamal House (Camberwell, London) it poses the question: are fire regulations being enforced and are the right products being used?

Risk assessments should be carried out on a regular basis to ensure the building is compliant in both the communal and individual areas. Installing the correct products should also help reduce the risk of a fire spreading. Here we take a look at some of the fire products on the market and how they comply with legislation.

Escape Doors...

Architectural ironmongery used on escape doors has been adapted to comply with specialist British Standards. The BS EN179 sets the standard needed for 'emergency exit hardware' which does not require a horizontal bar to be installed. Emergency hardware should only be used in premises where the occupants are familiar with escape routes such as in residential flats and offices. Push pad panic bolts and escape locks are ideal for these types of locations as they provide optimum security for the premises as well as being easily operable in an emergency.

When selecting hardware for a panic or emergency situation, the following should be taken into consideration:

- Which standard applies to your premises?
- What type of operation is required?
- What type of door opening is involved? Regulations state that this has to be outward opening.
- The height and width of the door also need to be taken into consideration.
- What security level and finish is required?

Fire doors...

When choosing a fire door there are three main factors to be considered: door width, door weight and door location. Most door

closers are graded with a power size, and once the weight and width of the door is selected the correct power size needs to be used. If the door is a fire door, the door closer must have a minimum power size of three.

Depending on where the door is situated, certain considerations need to be taken into account. For example, fire doors in public buildings have to adhere to the Disability Discrimination Act (DDA) and Part M of Buildings Regulations, which state that there has to be ease of access throughout the entire building.

Therefore, the use of automatic door opening devices or door closers combined with an electromagnetic hold open function is recommended. Furthermore, operation of door controls also needs to be taken into account; for instance, latching speed, closing speed, delayed actions and backcheck functions need to be considered so that the most appropriate closer is chosen for its environment.

However, for a more cost effective option, a foot operated device (used in conjunction with a door closer) offers a very practical solution to achieving fire safety. In an event of a fire a foot operated device such as 'Dorgard' will allow the door to automatically close as it deactivates after hearing a fire alarm. Please note that this system will need to be installed near a fire alarm in order for it to function properly: if it is not within close proximity it might fail to work.

Cam action door closers also provide ultimate fire protection as well as meeting minimum opening forces as suggested by BSA300 and the DDA. The cam action provides much greater efficiency than a rack and pinion door closer, providing a much lower opening resistance while delivering optimum closing force and control. This makes it ideal for people to move easily and safely throughout a building.

Smoke seals...

Smoke seals and brushes are vital products when installing a fire door. Intumescent fire and smoke seals expand at around 100°C to several times their original size to prevent fire from escaping through the door frame. You can combine this by installing a fire brush to prevent smoke from leaving the room, and you will have a more secure fire resistant door.

Signage...

All entry routes, facilities, and information should be clearly defined and indicated by appropriate signage, as stated by Part 3 of the Disability Discrimination Act (DDA).

For instance, all fire exit signs should comply with BS5499-5 and Health and Safety Regulations 1996. Since 24 December 1998, text-only 'fire exit' signs should have been supplemented or replaced with pictogram signs. Fire safety signs complying with BS 5499: Part I: 1990 already contain a pictogram and do not require changing.

Maintenance matters...

Architectural ironmongery can be affected by wear and tear which may influence how quickly people can exit a building in an emergency situation. Therefore, regular maintenance checks need to be carried out.

Visual checks are incredibly beneficial not only to identify areas which have suffered from wear but also to spot issues like rust, before it takes hold. Mechanical checks are also beneficial; for instance, a fire door closer needs to work effortlessly in order to provide the maximum level of safety - if you need to assist it, it's not working properly.

Maintenance or adjustments should be carried out in accordance with the original instructions provided with the product by the manufacturer. Failing to carry out these maintenance checks can be hazardous to anyone residing, visiting or working within the building. Spending a little time on these checks every week is vital to ensure architectural ironmongery remains efficient and to prevent against regular costly replacements.

Conclusion...

It's essential to consider every detail when choosing architectural ironmongery. Creating compliant premises is achievable with today's innovative products and the expert advice given by suppliers. Look for suppliers who stock the best range of value products and who are committed to next day delivery.

For more information visit www.IronmongeryDirect.com

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