

# MAINTENANCE OF FIRE DOORS AND FRAMES

Fire doors are passive safety elements whose function is to prevent the spread of fire and smoke between different areas of a building. These doors must comply with a series of standards and technical requirements that guarantee their fire resistance and proper operation in case of emergency. However, for fire doors to fulfill their function, it is necessary to carry out periodic maintenance to ensure their good condition and operability.

In this document, we will explain the most important aspects to consider for the maintenance of fire doors, as well as the advantages of extending their useful life and improving their performance. We will also offer some practical tips for carrying out maintenance properly and efficiently.

## **What is fire door maintenance?**

Maintenance of fire doors consists of carrying out a series of inspections, cleanings, adjustments, and repairs to verify the condition of the doors and their components, as well as to correct any anomaly or defect that may affect their operation. The aim is to ensure that fire doors are always in optimal condition to resist fire and close automatically in case of a fire.

Maintenance of fire doors must be carried out by qualified and authorized personnel, following the manufacturer's instructions and the criteria established by current regulations. Additionally, a documentary record of all actions taken, as well as the results obtained and incidents detected, must be kept.

## **Why is fire door maintenance important?**

Maintenance of fire doors is important for several reasons:

- It extends the useful life of the doors and their components, avoiding premature wear or breakage due to lack of care or improper use.
- It improves the performance of the doors, ensuring that they open and close correctly, do not have gaps or deformations, do not make noise or rub against the frame, do not

jam or block, etc.

- It prevents possible failures or breakdowns that may prevent the doors from functioning in case of emergency, jeopardizing the safety of people and property.
- It ensures compliance with current regulations, avoiding possible sanctions or legal responsibilities for non-compliance or negligence.

### **How should fire door maintenance be carried out?**

Maintenance of fire doors should be carried out following an established plan that considers the frequency, scope, and procedures to be followed. In general, two types of maintenance can be distinguished:

**Preventive maintenance:** This involves carrying out periodic inspections to check the condition and operation of the doors and their components, as well as to perform necessary cleanings and adjustments. Preventive maintenance should be carried out at least once a year, as established by standard UNE 23740-3.

**Corrective maintenance:** This involves making repairs or replacements when any anomaly or defect is detected in the doors or their components, either during preventive maintenance or due to some notice or incident. Corrective maintenance should be carried out as soon as possible, as established by standard UNE 23740-4.

In both cases, the following steps should be followed:

- Visually inspect the door and its components, checking for damage, dirt, corrosion, oxidation, deteriorated paint, etc.
- Verify the mechanical operation of the door, ensuring that it opens and closes correctly, does not have gaps or deformations, does not make noise or rub against the frame, does not jam or block, etc.
- Verify the electrical operation of the door, ensuring that the automatic closing system is activated correctly in case of fire, that the manual or automatic opening system (if any) works correctly, that there are no loose or damaged cables, etc.
- Verify the hydraulic operation of the door, ensuring that there are no leaks or pressure losses in the automatic closing system, that the retention or braking system (if any) works correctly, that there are no obstructed or damaged pipes or valves, etc.

- Clean the door and its components, removing dust, grease, dirt, or any other element that may affect the operation or aesthetics of the door. A soft and dry cloth should be used, or a specific product for cleaning metals, depending on the material of the door. Avoid using abrasive products, solvents, or high-pressure water, as they can damage the door or its components.
- Adjust the door and its components, correcting any misalignment, imbalance, gap, or deformation that may affect the operation or aesthetics of the door. The appropriate tools should be used, following the manufacturer's instructions. Avoid forcing or hitting the door or its components, as they may damage or misalign them.
- Repair or replace the door or its components when any anomaly or defect is detected that cannot be corrected with cleaning or adjustment. Original or compatible spare parts should be used, following the manufacturer's instructions. Avoid modifying or altering the door or its components, as this may affect its fire resistance or operation.

**What tips can be followed to carry out fire door maintenance?**

- In addition to following the above steps, some practical tips can be followed to carry out the maintenance of fire doors properly and efficiently:
- Plan maintenance in advance, considering the availability of qualified and authorized personnel, the necessary material and tools, the estimated time, and the most suitable time to carry it out.
- Inform users and occupants of the building about the maintenance, indicating the reason, duration, and precautions to be taken. Avoid performing maintenance when there is heavy pedestrian or vehicular traffic in the areas where the fire doors are located.
- Respect safety measures and protection during maintenance, using appropriate personal protective equipment, signaling the work area, disconnecting the electrical power if necessary, etc.
- Document the maintenance carried out, filling in the corresponding reports with the identifying data of the door and the personnel performing the maintenance, the actions taken, the results obtained, and the incidents detected. Keep a copy of the report in a safe and accessible place.