



POLICY INSTRUCTION

MOTION DETECTION SENSOR OPERATED FIRE SWING DOORS AND FIRE SAFETY REQUIREMENTS ON THE MOD ESTATE.

Number: PI 13/10

Property Directorate Sponsor: Robin Cawthorne

Date of issue: 26 Oct 10

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Who Should Read this: All personnel responsible for the day to day management and operation of electrical assets on the defence estate, specifically MOD staff, their agents, consultants, contractors and sub-contractors, Site Estate Authority Teams, DE Project Managers and Principal Support Providers.

When it takes effect: Immediately

When it is due to expire:
31 Oct 11

Health & Safety

Equality And Diversity Impact Assessment

This policy has been Equality and Diversity Impact Assessed in accordance with the Department's Equality and Diversity Impact Assessment Tool against:

Part 1 Assessment Only (no diversity impact found).

Document Aim: The aim of this Policy Instruction (PI) is to issue guidance on meeting fire safety requirements on the MOD estate where fire swing doors are operated by passive motion detection sensors.

Introduction

1. An investigation into a fire incident on an MOD site in a Main Galley (kitchen), which occurred in February 2010, concluded and recommended that:

“..... the automatic PIR operated swing doors of the galley did not fail safe to shut once the fire alarm had been activated. This situation permitted the doors to repeatedly open and close upon sensing movement and served to fan the flames and smoke throughout the facility. The refurbishment of the facility is to include an interface of the normal automatic door PIR system, in order to prevent the doors operating and remain shut to prevent the spread of smoke and flame effluent.”

2. BS 7036: Part 1: 1996 mentions requirements for automated fire doors:

Para 12.3.1 The automation of fire doors should not detract from their essential function as fire doors and reference should be made to local regulations.

Para 12.3.2 Automated fire doors should be self closing upon command (e.g. fire alarm), or when mains power failure occurs (see also 7.2.4). If the doors are to be held open, only a hold-open device conforming to BS 5839: Part 3: 1998 should be used.

Policy

3. This PI applies only to fire swing doors controlled by motion detectors and not to sliding, folding or rotating doors which are usually found in main entrances to buildings or lifts. The latter types of doors are not normally classed as fire doors and this PI would not normally apply to them.
4. With immediate effect Responsible Persons are to undertake checks to ensure that on activation of the fire detection/alarm system, all motion sensor operated fire doors fail safe to shut and remain shut until the system is reset. It must still be possible for the doors to be opened and closed manually to facilitate safe access and egress.
5. Where motion sensor operated fire doors do not fail safe to shut on activation of the fire alarm/detection system remedial work is to be undertaken to interface the door operation such that, on activation of the fire alarm system, the doors remain shut and do not operate until the fire alarm/detection system is reset at the main panel. It must still be possible for the doors to be opened and closed manually.
6. In exceptional cases where existing fire swing doors require considerable force to manually operate them measurements should be taken to ensure the resistance to break-out complies with BS 7036. BS 7036: Part 1:1996 Para 12.2.2 states that the resistance to break-out of fire doors should not be greater than 220 N at the leading or meeting stile. This should be sufficient to take into account the needs of disabled people.
7. Project Managers are to ensure that this requirement is complied with for all passive sensor operated fire doors in new and refurbished buildings.
8. Managers of predominantly USF occupied MOD land should consult their local Divisional Fire Officer for guidance on compliance with this PI.