

# SPECIFICATION

## 1.0 Horizontal FireMaster Fire Barriers

- 1.1 The horizontal fire barrier shall comprise of a fire resistant fabric barrier which is mounted between steel rollers that are powered by internal, electric, tubular geared motors. The system shall be tested to BS EN 1364-2:1999.
- 1.2 The motor contains the necessary gearbox, braking system and drive mechanism. All working parts shall be totally enclosed and protected within the steel roller.
- 1.3 The steel roller, complete with internal tubular motor, fabric barrier, tensioned bar at the leading edge of the fabric barrier and all associated fittings shall be fully enclosed within a 1.2 mm galvanised mild steel box. The tensioned bar shall be supported between the lateral side channels and be fixed to a steel carrier bearing system. Distance travel/limit switches are installed within the side channels to determine the closed position of the tensioned bar at the leading edge of the fabric barrier.
- 1.4 The complete system shall be tested complete with side containment in order to provide true fire resistance compliant with BS EN 1363-1:1999.
- 1.5 The complete system shall be tested for controlled fail-safe operational on mains power failure, and shall be reliant upon a primary and auxiliary Battery Back Up (BBU-ERU) system in the event of a total mains failure. The auxiliary Battery Back Up (BBU-ERU) system shall be connected to an independent and maintain power circuit (provided by others) from the primary unit.
- 1.6 Any combination of the alarm/control signal (provided by others), and/or the specified fail-safe functions shall activate the system.

## 2.0 Certification & Documentation

- 2.1 The complete system shall be tested to BS EN 1364-2:1999, BS EN 1363-1:1999, and have a Euro Classification in accordance with BS EN 13501-2:2003 by an accredited independent third party test laboratory that has UKAS Notified Body status.
- 2.2 The *manufacturer* must provide written documentation to prove that the system offered complies with *all* aspects of the tender specification.
- 2.3 The system *manufacturer* shall be Firm of Assessed Capability under BS EN ISO 9001:2008 for the Design, Manufacture, Installation and Commissioning of Fire Barriers. Full proof of compliance, including product schedules to be provided with the tender submission.

## 3.0 Operation

- 3.1 The system shall operate with mains power available, and in the event of mains power failure, shall operate under its own dedicated emergency Battery Back Up (BBU-ERU) system.
- 3.2 In the event of total mains power failure, the system must close, under its primary Battery Back Up (BBU-ERU) system. In the event that the primary Battery Back Up (BBU-ERU) supply fails then the system shall close via its auxiliary, independent fail-safe Battery Back Up (BBU-ERU) system. All interconnection cabling shall be suitably fire rated.
- 3.3 Operating speeds in all standard operating modes, i.e. mains powered opening/closure, shall be on site adjustable between 0,03 m/s and 0,08 m/s.

## 4.0 Construction

- 4.1 All moving parts to be contained and protected within the steel roller.

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4.2 Roller mechanisms shall be contained within 1.2 mm galvanised mild steel boxes, complete with minimum 2 mm galvanised mild steel end cheeks and brackets. The underside of this construction shall be fitted with a suitably rated rockblatt insert to reduce the build up of heat.

4.3 The tensioned bar at the leading edge of the fabric barrier shall comprise of a rectangular RHS section spanning the complete width of the opening.

## 5.0 Controls

5.1 The horizontal fire barrier operates via a Zone Control Panel (ZCP) interface with the Main Fire Alarm Panel (MFAP).

5.2 Motor Control Panel(s) (MCP) to be located adjacent to motors with appropriate access panel(s).

5.3 Primary and Auxiliary Battery Back Up system to be located adjacent to unit(s) with appropriate access panel(s).

5.4 Power and Wiring requirements to be submitted with the tender application. All interconnecting wiring shall be suitably fire rated.

5.5 Battery Back Up systems to have audio and/or visual power failure warning, for both mains failure and battery failure.

5.6 Visual power failure warning, voice warning and/or audio warning system to operate with both mains and emergency power in the event of total power failure. This is an optional feature if required.

## 6.0 Fabric

6.1 The fabric barrier must comply with all aspects of BS EN 1363-1:1999 when tested as part of the complete specimen.

## 7.0 Installation

7.1 All installation and wiring of unit(s) to be by contractors own staff. Consideration should be given to the construction of the building and types of fixings to be used.

7.2 Weight of unit(s) to be submitted with the tender application.

7.3 Contractors to prove compliance to *manufacturers* BS EN ISO 9001:2008 installation procedures.