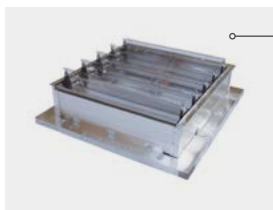


UniVent™ BRE Smoke Shaft System



Louvred Ventilator
Certified to BS EN12101-2



Lobby Ventilators
Certified to BS EN12101-8



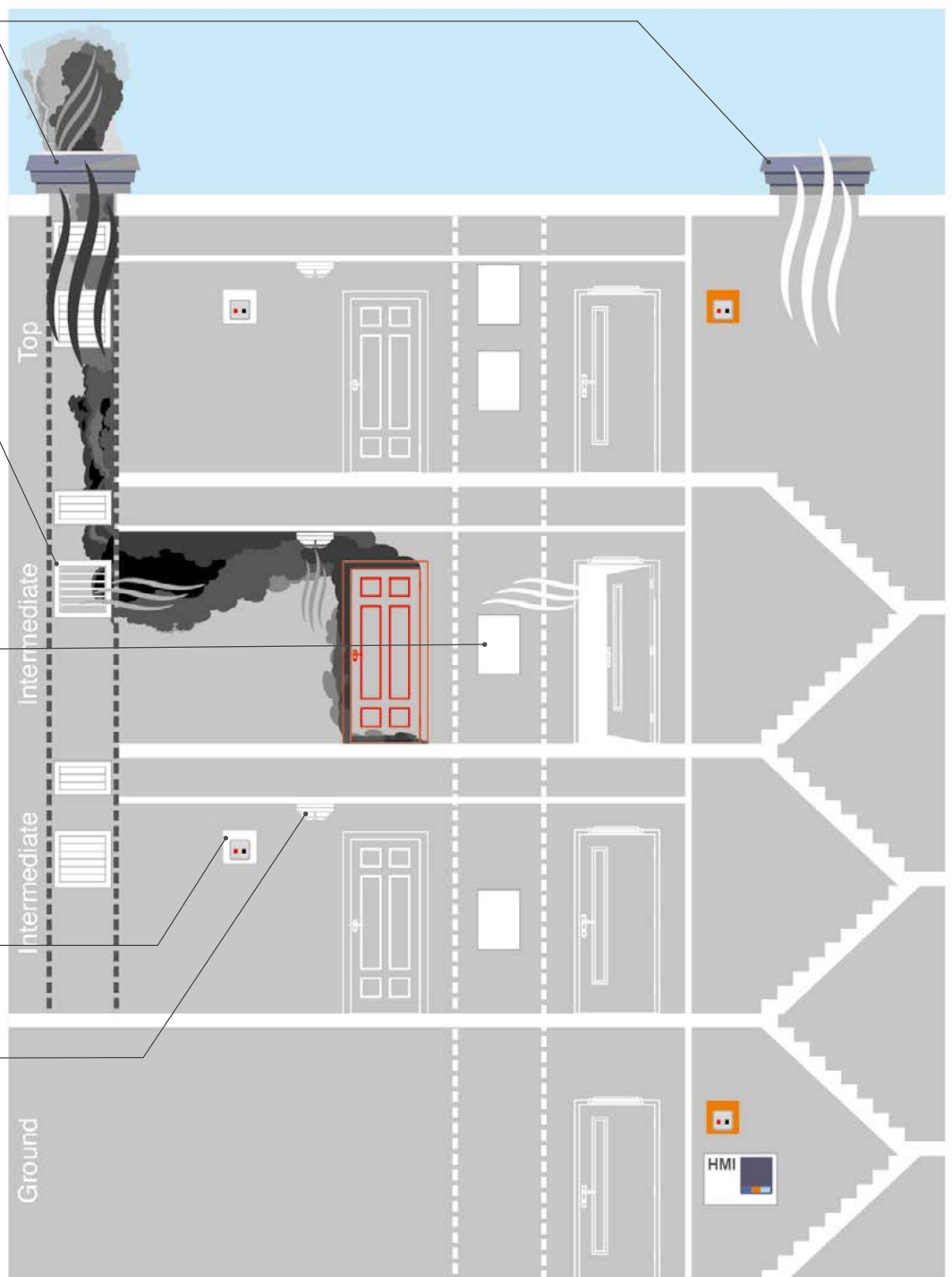
Lobby Interface Panels
Certified to BS EN12101-10



Maintenance Switch
BS ISO 21927-9, prEN 12101-9



Smoke Detector
Tested and approved to EN 54-7



Overview

UniVent is the original packaged smoke shaft system featuring tried and tested components for guaranteed reliability and safety.

The system is designed to meet the requirements of Approved Document B of the Building Regulations for the protection of escape routes of residential buildings and firefighting shafts in commercial buildings.

UniVent is equally suitable for new build projects and for refurbishment and replacement of non-conforming products to ensure compliance with the requirements of the Building Safety Act.

Specification

The UniVent Natural Smoke Shaft system is designed to exhaust smoke from the common lobbies through a builder's work shaft and operates automatically via smoke detection. Each lobby is equipped with a smoke control damper into the shaft connected to a fire alarm interface or dedicated smoke detectors. The head of the shaft is fitted with an automatically opening natural smoke and heat exhaust ventilator and another ventilator is fitted at the head of the staircase.

Features & Benefits

- The system operates automatically on smoke detection or fire alarm interface therefore firefighter intervention is not required as latest guidance.
- The system can also be used for daily ventilation with the addition of thermostatic and rain sensing controls, available as a standard upgrade.
- The system is fully compliant with Approved Document B and all relevant British Standards.

Approvals

Products certified to the following standards:

EN12101:02 — Smoke and heat control systems - Part 2

EN12101:08 — Smoke and heat control systems - Part 8

EN12101:10 — Smoke and heat control systems - Part 10

ISO 21927-9 — Smoke and heat control systems - Part 9

System Components

Lobby Ventilators - The Lobby Ventilators are multi zone smoke dampers CE marked to BS EN 12101-8 and the damper and grille sets shall have a geometric free area not less than 1.0m². The lobby vents shall be actuated by motorised actuators. Each damper is equipped with a test switch for maintenance and monitoring.

Lobby Interface Panels - local interface units on each floor power the automatic lobby ventilators upon receipt of signals from the smoke detectors or fire alarm interface. The panels are compliant to BS EN 12101-10, and BS ISO 21927-9 and incorporate battery back-up for 72 hours. The smoke detectors or fire alarm interfaces and local maintenance switches are connected to the interface modules and connections monitored for faults.

Stairwell ventilator - The stair will be ventilated by an automatic opening ventilator (AOV) fully compliant to BS EN12101-2 having a geometric free area of 1.0m². The ventilator will be insulated to prevent condensation occurring in the building.

Head of shaft ventilator - The top of the builder's work shaft will be ventilated by an automatic opening ventilator (AOV) fully compliant to BS EN12101-2 having a geometric free area of 1.5m². The ventilator will be insulated to prevent condensation occurring in the building.



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Stairwell & Head of Shaft Ventilator

The stair and top of the builder's work shaft will be ventilated by an automatic opening ventilator (AOV) fully compliant to BS EN12101-2. The stairwell ventilator will have a geometric free area of 1.0m² and the head of shaft ventilator will have a geometric free area of 1.5m². Both ventilators will be insulated to prevent condensation occurring in the building.



Maintenance Switch

Tamper-proof switch for testing and monitoring smoke control systems with a visual and audible indication in accordance with BS EN 12101 Part 9 and BS ISO 21927 Part 9. Two buttons provide override open, close and reset functions and three coloured LEDs with an audible buzzer indicate system health, fault and alarm status.



Photoelectric Smoke Detector

The photoelectric smoke detector uses a state-of-the-art optical chamber combined with an application-specific integrated circuit to provide quick and accurate detection of fires. The detector has an integral LED, which illuminates to provide a local alarm signal. This latches on and remains illuminated until the detector is reset by a momentary power interruption.