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4th April 2022.

Xxxxxxxxxx Xxx, London. WCXX XXX

Pressurized Fire Escape Systems: Inspection and Test Report.

Report Summary. I visited this building on Saturday 2nd April 2022, and I am grateful for the assistance of the Concierge and Ms Xxxx Xxxxxx for making the arrangements.

The purpose of our visit was to examine and test that both Pressurized Fire Escape Staircase Systems are in a good and satisfactory working condition and still perform to recognized standards.

Both systems were found to be in a satisfactory condition for their age and still meet the original B.S. 5588-4:1978 performance parameters.

Our only recommendation is to ensure that regular Inspection and Testing, as required by the Regulatory Reform (Fire Safety) Order, continues.

Overview. Xxxxxxxxxx Xxx, London is a substantial building that appears to date from the 1920's. It has a Basement, Floors Ground to Nine which are full of recently created Offices and a Plant Room at the very top.

The building has two Pressurized Staircase Systems which form part of the emergency exit routes from all floor levels; the installations are believed to have been carried out in 1996. Both Pressurized Staircase Systems would have been designed to conform with the B.S. 5588-4:1978 Standard which was current at that time. This Standard was subsequently reissued as B.S.5588-4:1998 and then BS EN12101-6:2005 as part of European Harmonization.

From B.S. 5588-4, one Pressurized Staircase is designed to perform as a "Class B" Fire Fighting System; to facilitate escape and to help the Fire Brigade fight a fire.

The other Pressurized Staircase is for "Means of Escape" using "simultaneous evacuation".

During our visit we carried out a full visual inspection of both systems. We then tested that all items work correctly, ran both systems, and checked that the pressures, air velocities and door opening forces were acceptable when compared to B.S.5588 part 4.

Design Standards. The purpose of the Pressurized Staircase Systems is to reduce the possibility of Smoke from a fire in the Office or Reception Areas from entering the vital Fire Escape / Fire Fighting Staircases.

Fire Fighting Staircase. The Design Standard requires "Class B" Pressurized Fire Fighting Staircase Systems to deliver the following performance parameters when operational:

a). Develop and maintain a pressure of 50 Pascals in the Staircase with all *doors closed.*

b). Develop and maintain a pressure of 45 Pascals in the associated Lobbies with all *doors closed.*

c). Deliver an air velocity of at least 2.0 Metres per Second through an *open door* on to the Fire Floor with various other doors open.

d). Maintain a pressure of 50 Pascals in the Fire Fighting Lift Shaft.

e). The force needed to open any door must not exceed 100 Newtons, applied to the handle.

Fire Escape Staircase. The Design Standard requires a "Class C Means of Escape" Pressurized Staircase Systems to deliver the following performance parameters when operational:

a). Develop and maintain a pressure of 50 Pascals in the Staircase with all *doors closed.*

b). Develop and maintain a pressure of 45 Pascals in the associated Lobbies with all *doors closed.*

c). Deliver an air velocity of at least 0.75 Metres per Second through an *open door* on to the Fire Floor. Final exit door closed.

d). Maintain a minimum pressure of 10 Pascals within the Staircase with the final exit door open.

e). The force needed to open any door must not exceed 100 Newtons, applied to the handle.

Component Parts.

Two Pressurization Fans. For reasons of robustness, two pressurization fans are required for each Staircase by the design standard. They are arranged as follows: -

Fire Fighting Staircase. The pressurization fans are mounted above head height and near to each other, in a Plant Room at the top of the building, accessed via a blue door. The two pressurization fans are sized at approximately 22KW and arranged as “Duty” and “Standby”, complete with an automatic change over system in the event of Duty Fan failure to perform, deduced by a pressure sensor.

Means of Escape Staircase. The pressurization fans are mounted above head height and near to each other, in a Plant Room at the top of the building which is accessed via an external walkway. The two pressurization fans are sized at approximately 11KW and arranged as “Duty” and “Standby”, complete with an automatic change over system in the event of Duty Fan failure to perform, deduced by a pressure sensor.

Pressurized Air Inlets. Pressurized air is taken from the fans via a “duct” and is injected into the Stairwells at various levels, all as required by the design Standard. The injection points are visible as inlet grilles on some of the half landings of the stairwells. Pressurized Air is also injected into each Lift Lobby via inlet grilles on each level.

The Fireman's Lift Shaft is also pressurized by means of separate ductwork, but the air also comes from the Fire Fighting Pressurization Fans.

Pressure Control. To ensure that the pressure in the Stairwells and Lobbies does not exceed 50 Pascals above atmosphere, Pressure Relief Louvers are fitted at the very top of both Staircases.

Relieving pressure more than 50 Pascals is very important. Excess pressure can mean that the doors between the Staircase and the Lift Lobby / Office Accommodation are difficult or even impossible to open. However, too little pressure will mean that the system is ineffective at preventing smoke ingress into the protected escape routes.

To ensure that the pressure in the staircase and the Lift Lobbies are balanced, an unusual stainless steel duct system has been installed, connecting the floor grille of each Lift Lobby to a grille high up on each staircase landing.

Air Release Path. To achieve the specified air velocity through open staircase and lobby doors given in the design Standard (2.0 Metres per Second for a Class "B" System and 0.75 Metres per Second for a Class “C” Means of Escape System) it is necessary to provide an Air Release path. This has been done by providing ventilation within the Office Accommodation areas and via some “natural leakage”.

Building Fabric. An important part of the system is that the parts of the building that will be pressurized are in good condition. i.e., no holes for air to leak from, doors are well fitting and auto-closing devices etc are effective. These items were all checked during my visit and were found to be satisfactory.

System Control Panel. The System Electrical Control Panel is in a small Plant Room at the very top of the Fire Fighting Staircase. The Control Panel is in fair condition for its age, but I noted that some of the indicator lamps have failed and there are no electrical drawings present.

Standby Electrical Supply. The building has an "Essential Services" electrical supply system. This Secondary Electrical Supply appears to come from a Diesel Generator. An Automatic Change Over Switching System is present in the Electrical Distribution Room at the very top of the Fire Fighting Staircase. I did not test this, but the building Managers should regularly test that this system is operational.

Fireman's Link. The system is linked to the building Fire Alarm System. Both Pressurization Systems will "Run" while the Fire Alarm System is active. They will stop when the Fire Alarm is "Reset".

Fireman's Override Switches. To enable the Fire Brigade to Stop and Start both Pressurization Systems, separate buttons have been provided in the Xxxxxx Street entrance (final exit door for the Fire Fighting Staircase). I tested these and confirmed that they work correctly.

Inspection, Test and Measurement Report.

Please find below the results of the Inspection, Test and Measurement visit of 2nd April 2022. The table below attempts to describe the physical layout of the Pressurization System within the building.

FIRE FIGHTING STAIRCASE, LIFT LOBBY & LIFT.

Fire Fighting Staircase.					
Building Level.	**Staircase Air Inlet Grille.**	**Door. Pressurized Staircase to Lift Lobby.**	**Lift Lobby Air Inlet Grille.**	**Fire Fighting Lift.** Target = 50 Pascals.	**Doors: Lift Lobby to Office Accommodation.**
10th Floor Plant Room. Pressurization Fans and Control Panel.	Pressure Relief Louvre. Grille at very top of Staircase. All Satisfactory.				Door to Plant Room. Satisfactory. Door to Lift Room. Satisfactory.
9th Floor.		**Larger Door** = 2470 mm tall. 840 mm wide. **Smaller Door** = 2470 mm tall. 380 mm wide. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.3 Metres per Second. Satisfactory. **Opening Force.** Approximately 78 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	**Larger Door** = 2440 tall. 925 mm wide. **Smaller Door** = 2440 tall. 295 mm wide. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.3 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 97 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing.				

	Satisfactory.				
8th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.3 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.3 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
7th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.2 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.2 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.				

6th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.1 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
5th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.1 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.				
4th Floor.		Same Door Sizes. **Both Closed.** Differential pressure	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals.

		approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.			Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
3rd Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.				
2nd Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase

		Larger Door Open, (larger door to accommodation also open). Average Air Velocity 2.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.			open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
1st Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (larger door to accommodation also open). Average Air Velocity 2.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 80 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Same Door Sizes. **Both Closed.** Differential pressures approximately 45 Pascals. Satisfactory. **Large Door Open.** (Lift Lobby Door to Staircase open). Average Air Velocity through door is 2.1 Metres per Second. Satisfactory. **Opening Force.** (Lift Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.				
Ground. Foyer contains the Building Fire Alarm Panel. Also contains the "Fireman's Override Buttons" for both Pressurized Staircase Systems.		Final Exit Doors to Xxxxxx Street. Average Air Velocity 2.4 Metres per Second. Satisfactory.	Pressurized. Satisfactory.	Pressurized. Satisfactory.	Not relevant.
	Separating				

	Door. Small Staircase then a further door connecting to the Basement Lift Lobby and associated areas.				
Basement.	Pressurized. Satisfactory.		Pressurized. Satisfactory.	Pressurized Lift Shaft. Satisfactory. Lift Door has a Fire Curtain.	

MEANS OF ESCAPE STAIRCASE.

Means of Escape Staircase.				
Building Level.	**Staircase Air Inlet Grille.**	**Door. Pressurized Staircase to Toilets Lobby.**	**Lobby Air Inlet Grille.**	**Doors: Toilet Lobby to Accommodation.**
Emergency Escape Hatch from Plant Room above.	Pressure Relief Grille at the top of the Staircase. 950mm x 300mm. Satisfactory.			
9th Floor.		**Larger Door** = 2470 mm tall. 840 mm wide. **Smaller Door** = 2470 mm tall. 380 mm wide. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.3 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.1 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.			
8th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.2 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.3 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 95 Newtons,

				applied on the door handle. Satisfactory.
7th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.2 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.3 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.			
6th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.1 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.2 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 93 Newtons, applied on the door handle. Satisfactory.
5th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.1 Metres per Second. Satisfactory. **Opening Force.**	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.1 Metres per Second. Satisfactory. **Opening Force.** (Toilet

		Approximately 78 Newtons, applied on the door handle. Satisfactory.		Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.			
4th Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.2 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
3rd Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 1.0 Metres per Second. Satisfactory. **Opening Force.** Approximately 72 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.3 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 89 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.			
2nd Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory.

		to accommodation also open). Average Air Velocity 0.9 Metres per Second. Satisfactory. **Opening Force.** Approximately 74 Newtons, applied on the door handle. Satisfactory.		**Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.1 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 95 Newtons, applied on the door handle. Satisfactory.
1st Floor.		Same Door Sizes. **Both Closed.** Differential pressure approximately 5 Pascals. Satisfactory. **Larger Door Open,** (door to accommodation also open). Average Air Velocity 0.9 Metres per Second. Satisfactory. **Opening Force.** Approximately 70 Newtons, applied on the door handle. Satisfactory.	Pressurized. Satisfactory.	Has a Square Pressurized Air Inlet Grille on the Ceiling. **Closed.** Differential pressure approximately 45 Pascals. Satisfactory. **Door Open.** (Toilet Lobby Door to Staircase open). Average Air Velocity through door is 1.1 Metres per Second. Satisfactory. **Opening Force.** (Toilet Lobby Door to Staircase open). Open door needs approximately 88 Newtons, applied on the door handle. Satisfactory.
	Air Inlet Grille on half Landing. Satisfactory.			
Ground.			Large Pressurized Air Inlet Grille at Ceiling Level within this three-way lobby. Large air flow present to achieve the required residual pressure for a "Class C" System. Satisfactory.	With double doors to Reception open, air flows out to Xxxx Xxxxx Street Level via Reception Area. 1.4 Metres per Second through open final exit door. Residual Pressure is more than the required 10 Pascals. Satisfactory.
Basement / Lower Ground.				Small Lobby, both doors open the correct way and are satisfactory. 0.8 Metres per Second with both doors open. Satisfactory.

Measuring Instruments.
I used the following instruments to carry out the measurements:

For differential pressure: DPM TT550 High Resolution Micro-manometer.

For air velocity: Kestrel 1000 by Richard Paul Russell Ltd.

A light spring balance 0 – 20 Kg range for measuring the force needed to open the doors.
1 Kg = 9.81 Newtons. 100 Newtons is approximately 10.2 Kg.

Notes & Recommendations. We recommend that the following points are actioned if they are not already being done: -

1. **Secondary Electrical Supply.** Periodically test that the secondary electrical supply, derived from a Diesel Generator, is automatically connected to the Pressurization Systems when needed. i.e., simulate a failure of the primary supply. Ensure that the Diesel Generator is properly maintained, via a contract, and has adequate fuel.

2. **Fire Alarm Linkage.** Periodically ensure that activation of the Fire Alarm causes the Pressurization Systems to run. Just running the Pressurization System using the ON / OFF buttons is not enough; it does not test the crucial fire alarm linkage.

3. **Duty / Standby Pressurization Fans.** For both systems, periodically test that the Standby Pressurization Fans operate by simulating failures of the Duty Fans i.e. When the Duty Fan is running, turn off the Motor Isolator; the Standby Fan should start up within a few Seconds. This also tests the differential pressure switch, the delay timer, and the Control Circuits.

4. **System Control Panel Maintenance.** The electrical control panel for both Pressurized Staircase Systems is in a small room, just inside the Plant Room and accessed via the top of the Fire Fighting Staircase. I noticed that several of the indicator bulbs on this control panel had failed, giving the impression that it was “dead”. We recommend that the filament bulbs be replaced.

   There are no electrical drawings present within this control panel, various regulations state that there should be. It may be worth tracking down the original system installers who could be “Xxxxxx” of Xxxxx, January 1996 to see if copies of the drawings can be obtained. Alternately, it may be necessary to employ an Electrical Engineer to survey the Control Panel and produce some drawings.

Please contact me if there are any questions at all or if more information is needed.

Christopher Fletcher.

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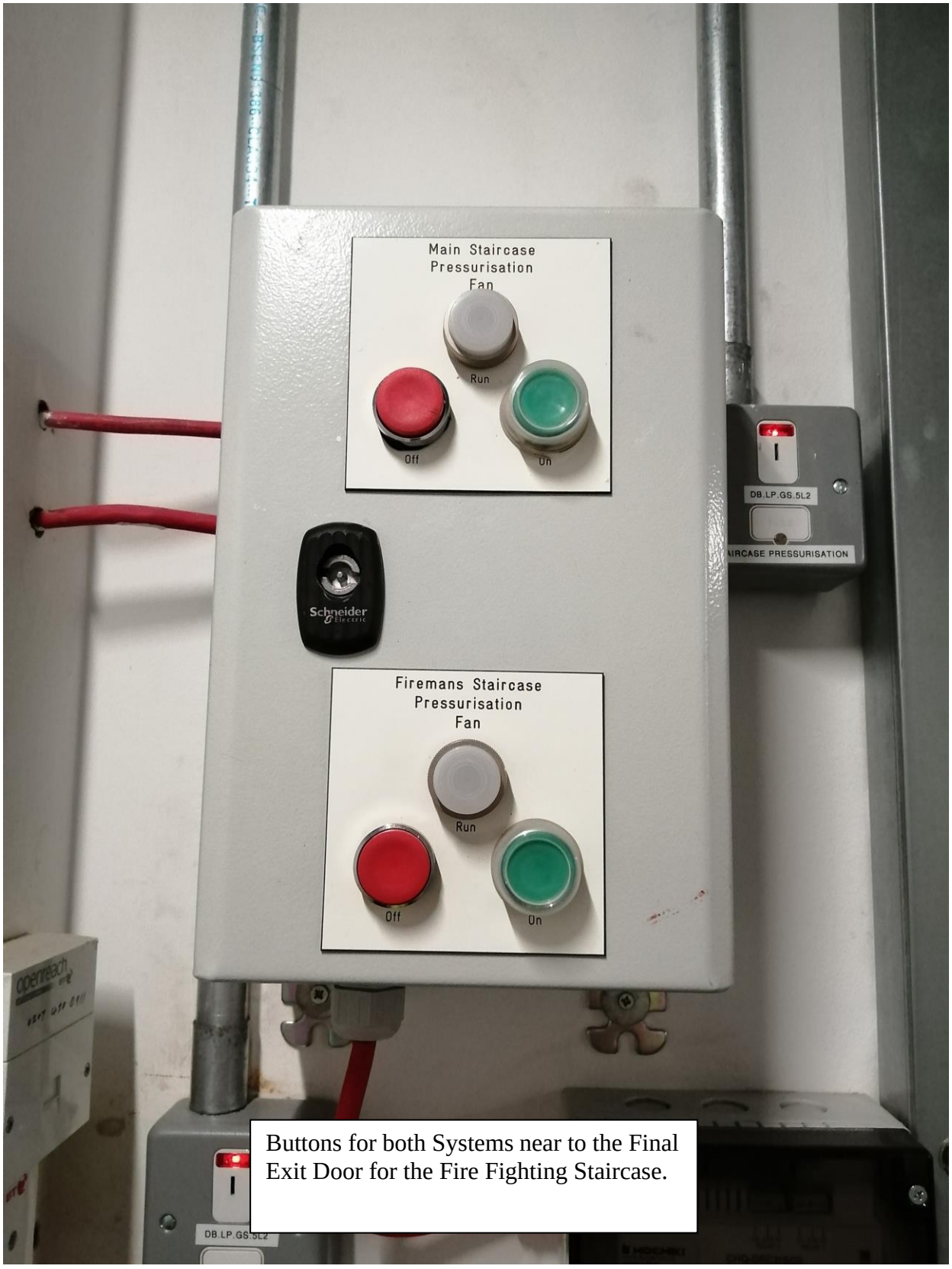
Photographs below.

Pressure Relief Louvers at the top of the Fire Fighting Staircase.

Pressurized Air Inlet Grille.

Connecting Ductwork to the Lift Lobby of the above floor. This enables a similar pressure throughout the Stairwell / Lift Lobbies.

Connecting Ductwork to the Staircase of the below floor. This enables a similar pressure throughout the Stairwell / Lift Lobbies.



Buttons for both Systems near to the Final Exit Door for the Fire Fighting Staircase.

Testing the Air Velocity through the Final Exit Door for the Fire Fighting Staircase. 2.4 Metres Per Second.

Pressure Relief Louvers and Pressurized Air Inlet at the top of the Means of Escape Staircase.

Final Exit Door for the Means of Escape Staircase.

Control Panel for both Pressurization Systems in the Plant Room at the top of the Fire Fighting Staircase.