

PRESTIGE AIR TECHNOLOGY LTD
RETROSPECTIVE
LOW ENERGY CLEAN AIR BLANKET
O & M MANUAL
DOCUMENTATION

AT

66 MARLPOOL DRIVE
REDDITCH
WORC
B97 4RX

FOR

REDDITCH BOROUGH COUNCIL
TOWN HALL
WALTER STRANZ SQUARE
REDDITCH
WORCESTERSHIRE
B98 8AH

REF: 2385

DATE: 2nd December 2011.

**RETROSPECTIVE
POSITIVE PRESSURE SYSTEM
INSTALLATION REPORT**

NAME:

ADDRESS:

66 Marpool Drive
Redditch
Worcs.
B97 4RX

TELEPHONE NO:

.....

INSTALLATION NO:

2385

**INSTALLATION
DESCRIPTION:**

1 No. Positive Pressure Unit

SERIAL NO:

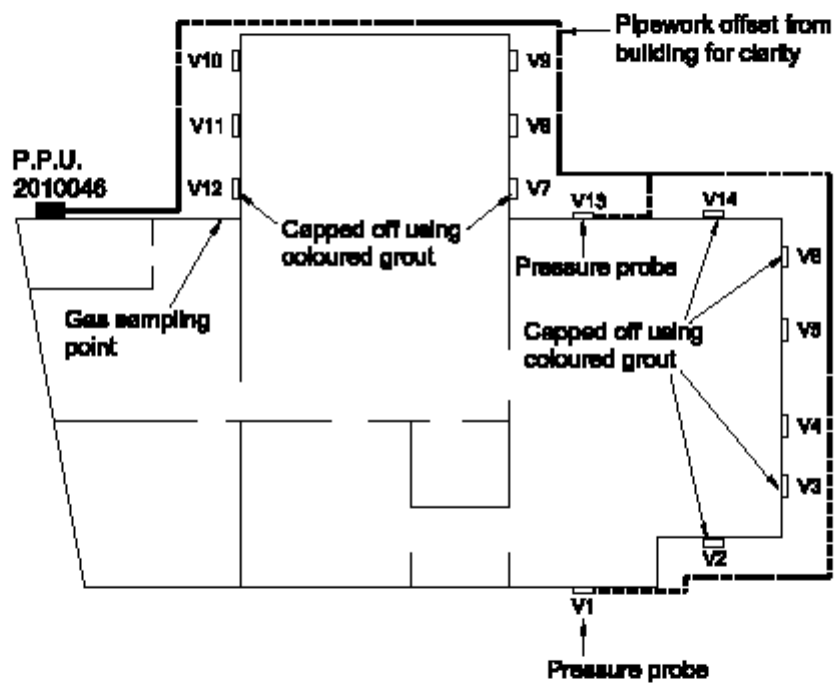
2010046

AS BUILT

METHOD STATEMENT

1. Prior to commencing work building to be entered to check for existing levels of methane and carbon dioxide as per appended Safe Working Protocol. Work to continue when all internal ambient levels at or below 1.0% by volume methane 1.5% carbon dioxide.
2. Methane and carbon dioxide levels to be checked at all perimeter vents. If levels detected are above 1.0% methane v/v and 1.5% carbon dioxide v/v internal monitoring as above must be carried out at the middle and at the end of the working day.
3. 2no. existing external vents to be selected as air input points.
4. Prior to commencing work each input point to be checked for existing levels of methane and carbon dioxide as per appended Safe Working Protocol.
5. Prior to forming shallow excavations services to be traced within work area and their disruption avoided.
6. Immediate work area to be cordoned off with temporary fluorescent barrier. Cordoned area to include any excavations and temporary arisings. Access to work area to be agreed and adhered to at all times.
7. 2no. shallow excavations may need to be formed at the input points immediately adjacent to the property, approx dims to be min 1.5m x 1.0m x 0.5m.
8. 2no. existing 75mm horizontal sub-floor vent pipes to be cleared of any debris and utilised as activation air input points. Camera probe to be utilised to confirm visual viability of input points. Clearance to be carried out manually using hand augers.
9. All gas vents not utilised as air input points to be flow restricted with a coiled section of PAG 6 geocomposite voidformer.
10. Tracer gas introduced to inlet fan and its presence checked for and confirmed at perimeter vents and/or internally around perimeter construction to confirm overall zone of influence of sub-floor area. In the event that the zone of influence cannot be demonstrated from existing vents and or internal monitoring points ground to be excavated externally adjacent to the property to establish zone of influence. In the event that a suitable zone of influence is not achieved subsequent air vents and or a combination of air vents to be selected and checked as suitable air input points to achieve an overall zone of influence.
11. 1no. 110mm outlet PPU to be wall mounted on structure or frame mounted remote from structure and connected to the air input points by a bifocated section of 110mm plastic pressurisation manifold located within ground.

12. Manifold to contain 2no. sub-floor probes connected back to PPU by 8mm probe pipe and to terminate in an externally available sample port. See Prestige Air Drawing No. 5719 AA(57)002. Purpose of probe to be for manifold delivery pressure monitoring. An additional sub-floor probe to be inserted below the structure via another external vent, exact location to be dependent upon local conditions. Purpose of additional probe to be for subsequent ground gas sub-floor monitoring.
13. PPU unit to include 1no. GSM telemetry system to allow for connection to Prestige Air's 24 hour call out and maintenance service.
14. PPU's electricity supply to be connected to 1no. fused spur outlet. Please see attached Wallis's method statement and risk assessments.
15. Where necessary existing external vents to be cleared or blocked off.
16. All excavations to be backfilled and disturbed surfaces reinstated as is reasonably practicable.
17. Internally where possible any major air loss points to be located and sealed, identified by tracer gas being introduced through newly improved vent network. Dependant on size will be sealed with silicone based sealant, close cell foams and or liquid applied membranes.
18. System to be commissioned.
19. Risk assessments 2, 3, 4 and COSHH for sulphur hexafluoride, Safe Working Protocol Entry into a Building and working in shallow excavation for methane and carbon dioxide monitoring to apply.



No 66 Marpool Drive

ZONE OF INFLUENCE RECORD

Date:23.11.11..... Atm :1008 mb.....

Location	Levels Recorded
V1 Input point	
V2	130
V3	200
V4	100
V5	100
V6	800
V7	500
V8	200
V9	200
V10	130
V11	80
V12	50
V13 Input point	
V14	800
Toilet Wall outside	13
Utility room/garage party wall outside	500
Garage wall outside	300
Garage/games room party wall	300
Games room wall outside	800

GAS SAMPLE PORT READINGS

Period	Location	CH ₄ %v/v	C0 ₂ %v/v	O ₂ %v/v
Initial 22.11.11. 08.00	V1	0.6	1.4	19.2
	V2	0.0	0.0	20.1
	V3	0.0	0.0	20.1
	V4	0.0	0.0	20.1
	V5	0.0	0.0	20.1
	V6	0.0	0.0	20.1
	V7	0.0	0.0	20.1
	V8	0.0	0.0	20.1
	V9	0.0	0.0	20.1
	V10	0.0	0.0	20.1
	V11	0.0	0.1	20.0
	V12	0.0	0.1	20.0
	V13	6.9	11.1	8.8
	V14	0.0	0.0	20.1
Commissioning 23/11/11 15.30				
	V2	0.0	0.0	20.6
	V3	0.0	0.0	20.6
	V4	0.0	0.0	20.6
	V5	0.0	0.0	20.6
	V6	0.0	0.0	20.6
	V7	0.0	0.1	20.7
	V8	0.1	0.1	20.7
	V9	0.1	0.1	20.4

Commissioning (cont) 23/11/11 15.30	V10	0.1	0.0	20.8
	V11	0.0	0.9	18.9
	V12	0.0	0.2	20.7
	V14	0.0	0.0	20.8
Final 24/11/11 11.30				
	V2	0.0	0.0	20.3
	V3	0.0	0.0	20.3
	V4	0.0	0.0	20.4
	V5	0.0	0.0	20.4
	V6	0.0	0.1	20.3
	V7	0.1	0.2	20.1
	V8	0.1	0.1	20.1
	V9	0.1	0.0	20.0
	V10	0.0	0.0	20.2
	V11	0.0	0.0	20.1
	V12	0.0	0.0	20.1
	V14	0.1	0.2	20.2

FINAL INSPECTION CERTIFICATE

EQUIPMENT DESCRIPTION

1 No. Positive Pressure Unit

SERIAL NUMBER

2010046

INSPECTION DATE

7th October 2011

CHECK		ACCEPTABLE	UNACCEPTABLE	ACTION REQUIRED
1.	Physical state and condition of outer casing	√		
2.	Inclusion of 2 No. keys and correct operation of casing lock	√		
3.	Correct application of valve open/close labels	√		
4.	Correct application of speed control label	√		
5.	Correct application of fan unit label	√		
6.	Swarf removal from base of backplate assembly	√		
7.	Correct formation of backplate and placing of fixing holes	√		
8.	General state and condition of assembly	√		
9.	Disconnection of positive wire from back up battery	√		
10.	Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch on and Positive Pressure Unit switch on	√		
	a) System Run Light On	√		
	b) Fail 1 light Off	√		

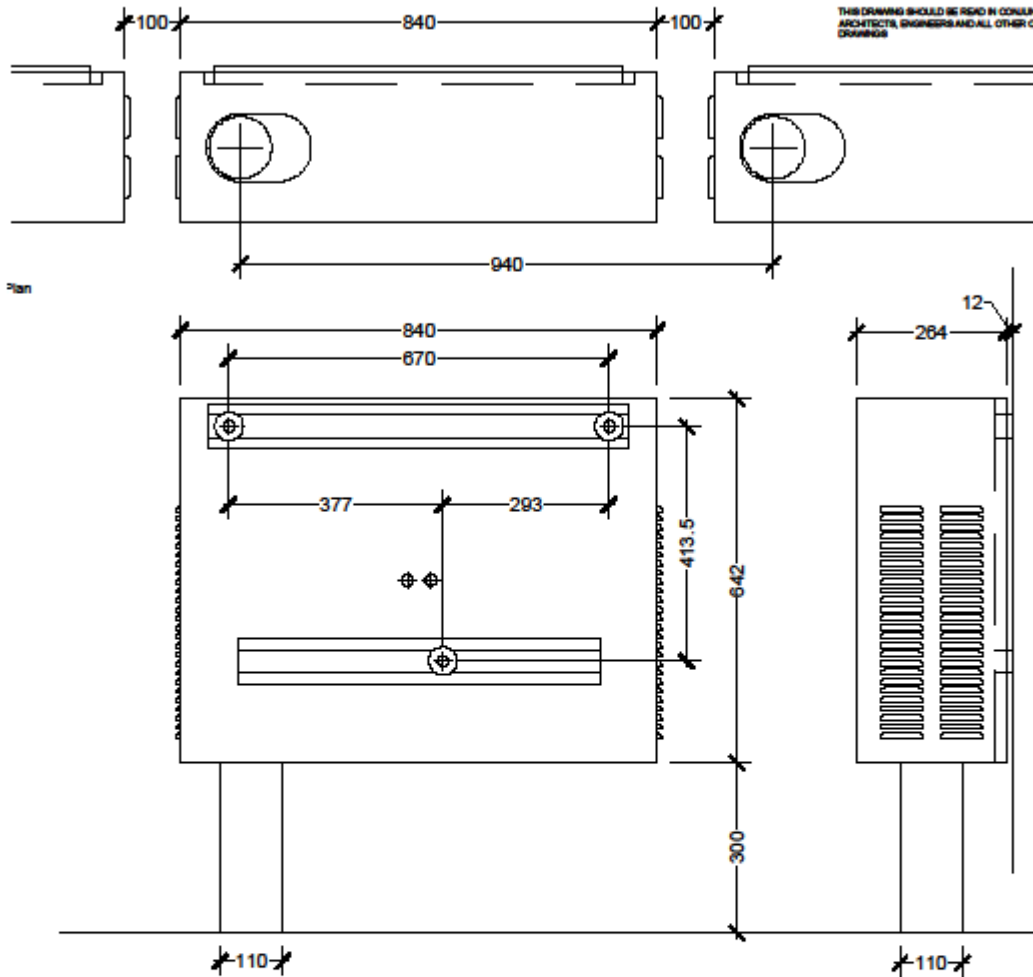
	c) Fail 2 light Off	√		
11.	Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch off and Positive Pressure Unit switch on	√		
	a) System Run Light Off	√		
	b) Fail 1 light On	√		
	c) Fail 2 light On	√		
12.	Speed controller audibly controlling fan speed	√		

Signed



Print Name Richard Stevens

NOTE:
 SUBJECT TO STATUTORY COMMENTS
 SUBJECT TO SURVEY
 BASED ON OS MAP REPRODUCED BY PERMISSION OF
 CONTROLLER OF HM STATIONARY OFFICE (S) CROWN
 COPYRIGHT
 DO NOT SCALE THIS DRAWING
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH
 ARCHITECTS, ENGINEERS AND ALL OTHER CONSULTANTS
 DRAWINGS



Rear Elevation

Side Elevation

		Prestige Group, Graham Mackay Group Sales, Graham Mackay 44 Judd Street, London, EC1A 3DF Tel: 020 7461 2000 Fax: 020 7461 2001
PRESTIGE AIR TECHNOLOGY		
Standard detail Component Elevations Low energy P.P.U Elevations Prestige Air-Technology Ltd		
Date October 2001	Scale 1:10	Drawn by JH
For Information		No
5719 AA(57) 012		P5



AMTECH

FastTest V2011.0.1

This certificate is not valid if the serial number has been defaced or altered.

IMR2/ 0375450

MINOR ELECTRICAL INSTALLATION WORKS CERTIFICATE

Issued in accordance with British Standard BS 7671 - Part 6: Wiring for Electrical Installations to an Approved Contractor or Performing duty in accordance with BS 7671, Wiring Regulations (Approved Part), Harmonized Directive 001: 024

To be used only for minor electrical work which does not include the provision of a new circuit

PART 1: DETAILS OF THE MINOR WORKS	
Client: Prostage Air Technologies	Details of departure from BS 7671 as recorded: None
Estimated date of completion: 22/11/2011	Contract reference: None
Description of the minor works: To install extra point on radial circuit in garage for pump	Location/addresses of the minor works: Install supply for fan 65 Marlpool Drive Redditch Worcestershire B97 4RY

PART 2: DETAILS OF THE MODIFIED CIRCUIT	
System size of existing arrangements: 16-63	<input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A <input type="checkbox"/> TT <input type="checkbox"/> TN-C <input type="checkbox"/> TN-S <input type="checkbox"/> T
Protective measures taken against electric shocks: ADS	
Overcurrent protective device for the modified circuit: BS EN 60898 MCB	Type: B Rating: 16 A
Residual current device (if applicable): BS EN 61008 RCD	Type: N/A Rating: 30 mA
Details of the new supply: Type: PVC/PVC cables	External method: C Conductor size: 2.5 mm ² Cable type: 2.5 mm ²
Where the minimum for protection against electric shocks ADS, is not met, the minimum for protection against electric shocks determined by BS 7671:	0.4 Information provided by BS 7671: 2.29 (a)
Comments, if any, on existing installation: None	

PART 3: INSPECTION AND TESTING OF THE MODIFIED CIRCUIT AND RELATED PARTS		Percentage inspection and tests	
Confirmation that the issue of electrical safety has been undertaken: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Confirmation of the competency of carrying out the work: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Continuity of conductive parts: R_{LN} R_{BB} 0.22 Ω at I_{sc} 63A Ω	<input checked="" type="checkbox"/>	Continuity of the adequate protective bonding: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Insulation resistance: R_{i1} R_{i2} N/A $M\Omega$	<input checked="" type="checkbox"/>	Confirmation of earthing potentials: <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Phase and sequence testing: R_{i1} R_{i2} 500 $M\Omega$	<input checked="" type="checkbox"/>	Maximum measured earth fault loop impedance: 0.28 Ω	<input checked="" type="checkbox"/>
Earth fault loop impedance: Z_{s1} Z_{s2} 500 $M\Omega$	<input checked="" type="checkbox"/>	RCD operating time at $I_{\Delta n}$ (if RCD fitted): 18.7 ms	<input checked="" type="checkbox"/>
Resistance to earth: 500 $M\Omega$	<input checked="" type="checkbox"/>	RCD operating time at $I_{\Delta n}$ (if applicable): 9.8 ms	<input checked="" type="checkbox"/>
Approved for installation, if any, on the inspection and test report: None			

PART 4: DECLARATION	
I, the undersigned, the minor electrical installation works as detailed in Part 1 of this certificate, does not impinge the safety of the existing installation, that the said works have been designed, constructed, inspected, tested and verified in accordance with BS 7671 - Part 6 as shown on the data sheet and that the work is carried out in accordance with BS 7671 - Part 6 as detailed in Part 2 of this certificate.	
Name of contractor: STEVE BROWN	Name of recipient of the work: Walis Electrical Services Ltd
Signature:	Address and Postcode: Unit 1 Weycroft Avenue Auricular Dorset EX15 5HU
Position: Cleanician	
Date: 24-11-11	
Employment Number: 0 1 5 2 7 3	Employment Number (if applicable): 0 0 0

This form is based on the model shown in Appendix 8 of BS 7671
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Please see the 'Notes for Recipients' on the reverse of this page.

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