

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

**AT**

**64 MARLPOOL DRIVE**  
**REDDITCH**  
**WORC**  
**B97 4RX**

**FOR**

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

**REF: 2385**

**DATE: 8<sup>th</sup> November 2011.**

**RETROSPECTIVE  
POSITIVE PRESSURE SYSTEM  
INSTALLATION REPORT**

**NAME:**

**ADDRESS:**

64 Marpool Drive  
Redditch  
Worcs.  
B97 4RX

**TELEPHONE NO:**

.....

**INSTALLATION NO:**

2385

**INSTALLATION  
DESCRIPTION:**

1 No. Positive Pressure Unit

**SERIAL NO:**

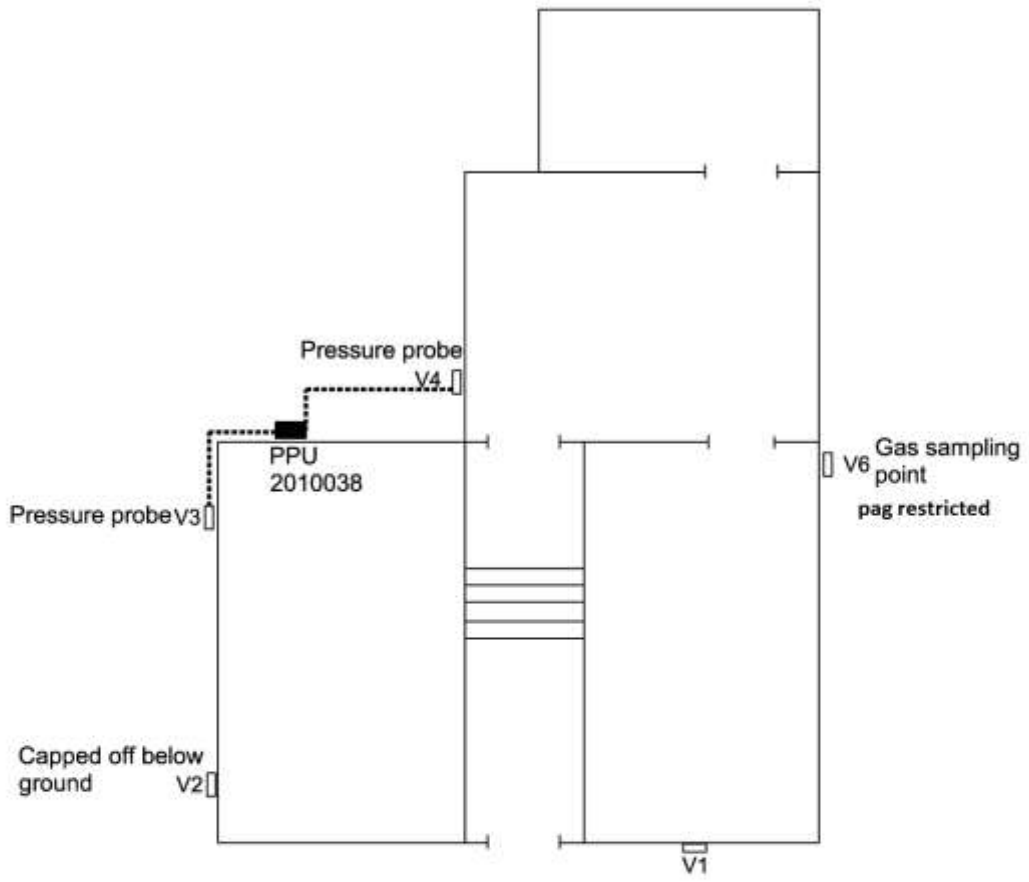
2010038

## 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 64 Marpool Drive

## ZONE OF INFLUENCE RECORD

Date: .....2.11.11..... Atm : .....989 mb.....

Location	Levels Recorded
V1	130
V2	800
V3 Input point	N/A
V4 Input point	N/A
V5	80

## GAS SAMPLE PORT READINGS

Period	Location	CH <sub>4</sub> %v/v	C <sub>0</sub> 2%v/v	O <sub>2</sub> %v/v
<b>Initial</b> 1.11.11. 08.00	V1	0.0	0.0	20.2
	V2	0.1	3.7	13.7
	V3	3.5	2.6	14.8
	V4	4.1	6.1	10.8
	V5	0.5	0.4	19.5
<b>Commissioning</b> 1.11.11. 11.30	V1	18.0	14.2	3.8
	V2	3.8	9.0	9.1
	V5	14.3	13.2	4.3
3.11.11. 08.00	V1	5.9	6.1	11.9
	V2	0.0	3.4	16.9
	V5	5.8	6.4	9.8
<b>Final Commissioning</b> 4.11.11. 08.00	V1	0.0	1.4	17.6
	V2	0.0	0.1	20.1
	V5	0.0	0.9	18.9





## FINAL INSPECTION CERTIFICATE

**EQUIPMENT DESCRIPTION**

1 No. Positive Pressure Unit

**SERIAL NUMBER**

2010038

**INSPECTION DATE**

7<sup>th</sup> 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	√		

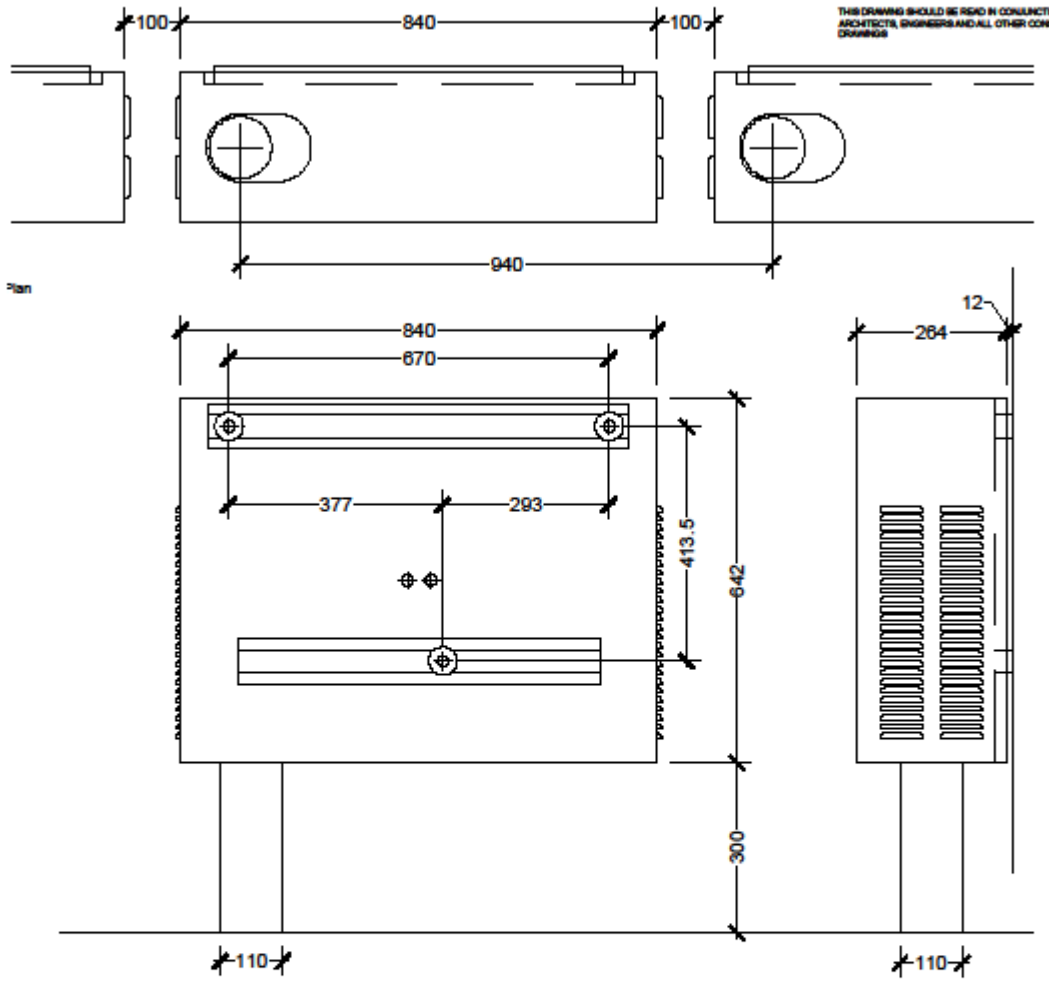
	c) Fail 2 light Off	√		
11.	Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch off and Positive Pressure Unit switch on	√		
	a) System Run Light Off	√		
	b) Fail 1 light On	√		
	c) Fail 2 light On	√		
12.	Speed controller audibly controlling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

Signed



Print Name Richard Stevens

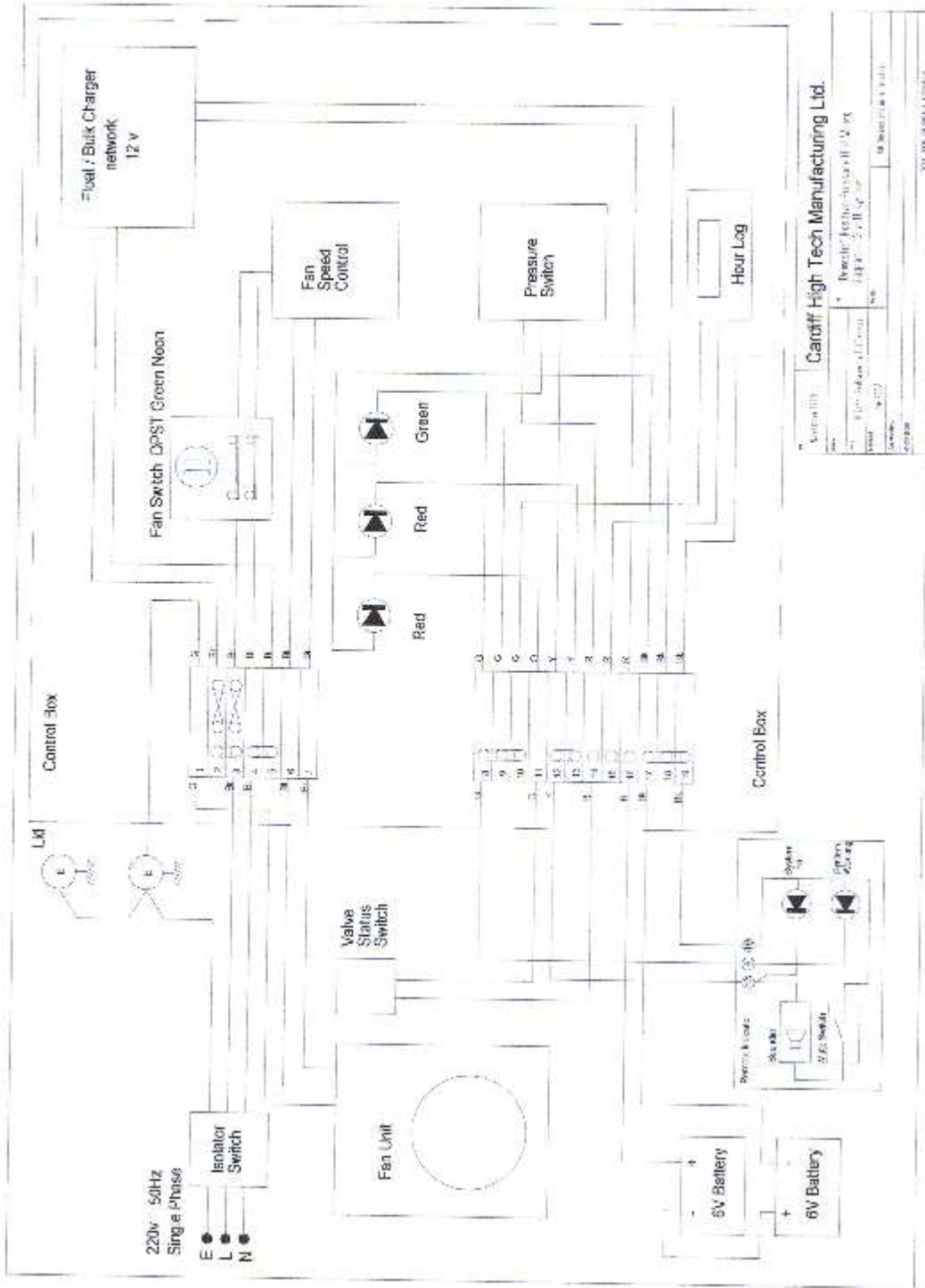
NOTE:  
 SUBJECT TO STATUTORY COMMENTS  
 SUBJECT TO SURVEY  
 BASED ON OS MAP REPRODUCED BY PERMISSION OF  
 CONTROLLER OF HM STATIONARY OFFICE (S) CROWN  
 COPYRIGHT  
 DO NOT SCALE THIS DRAWING  
 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH  
 ARCHITECTS, ENGINEERS AND ALL OTHER CONSULTANTS  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



Rear Elevation

Side Elevation

		Prestige Group, Graham Mackay Group Sales, Graham Mackay 44/45 200 GLENFERNAN AVENUE, GLENFERNAN
<b>PRESTIGE</b>		
Standard detail Component Elevations Low energy P.P.U Elevations Prestige Air-Technology Ltd		
DATE October 2011	SCALE 1:10	DRAWN BY JH
For Information		NO
5719 AA(57) 012		P5



Company	Caraff High Tech Manufacturing Ltd.
Address	10000 High Tech Drive, Suite 100, Mississauga, ON L4V 1V9
Phone	905-270-1111
Fax	905-270-1112
Website	www.caraff.com
Revision	1.0
Date	2023-10-27
Drawn By	J. Smith
Checked By	M. Jones
Scale	1:1



**AMTECH**  
Fast Test V2011.0.1

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

IMR2/ 0375446

## MINOR ELECTRICAL INSTALLATION WORKS CERTIFICATE

Issue in accordance with British Standard BS7671 - Requirements for Electrical Installations by an Approved Contractor. Certificate valid only if issued with NICEIC Worksafe logo, in place of the Field In-charge logo, in accordance with BS7671.

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: <b>Prestige Air Technologies</b>	Details of department, if any from BS 7671: <b>None</b>
Date when work completed: <b>02/11/2011</b>	Duration of work: <b>None</b>
Description of the minor works: <b>To alter radial circuit in garage to recall spur for fan unit</b>	Location/Address of the minor works: <b>Incall Supply for Fan Unit 84 Mailpost Drive Rendish D97 4RX</b>

PART 2: DETAILS OF THE MODIFIED CIRCUIT	
System voltage and earthing arrangements:	TT-C-S <input checked="" type="checkbox"/> TT-S N/A <input type="checkbox"/> TT N/A <input type="checkbox"/> TN-C N/A <input type="checkbox"/> TN N/A <input type="checkbox"/>
Protective measure taken against electric shock:	ACS
Overcurrent protective device for the modified circuit:	BS EN 60898-1 <b>50093 MCB</b> Type <b>B</b> Rating <b>32</b> A
Residual current device (if applicable):	BS EN 60898-1 <b>4293 RCD</b> Type <b>N/A</b> I <sub>Δn</sub> <b>30</b> mA
Details of wiring system: Type <b>PVC/PVC cables</b>	Wiring method <b>C</b> Cable size <b>1.5</b> mm <sup>2</sup> Conductor <b>1</b> mm <sup>2</sup>
Where the measure for protection against electric shock is AUS: insert maximum disconnection time permitted by BS 7671:	<b>0.4</b> s Release time per BS 7671 <b>1.15</b> s
Comments, if any, on existing installation: <b>Garage Radial on Same Circuit Breaker as Garage Ring</b>	

PART 3: INSPECTION AND TESTING OF THE MODIFIED CIRCUIT AND RELATED PARTS		Essential inspections only	
1. Confirmation that all applicable regulations have been undertaken	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	2. Continuity of the integrity of the thing	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3. Continuity of the adequacy of protective bonding	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	4. Continuity of the adequacy of protective bonding	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Insulation resistance: Line to line	<b>N/A</b> MΩ	5. Continuity of the adequacy of protective bonding	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Line to neutral	<b>500</b> MΩ	6. Maximum measured earth fault loop impedance, Z <sub>e</sub>	<b>0.75</b> Ω
Line to earth	<b>500</b> MΩ	7. RCD operating time at I <sub>Δn</sub> (1 AC fault)	<b>28.0</b> ms
Line to earth	<b>500</b> MΩ	8. RCD operating time at 5I <sub>Δn</sub> (non-fault)	<b>3.7</b> ms
Agreed limitations: <b>None</b>		Agreed limitations: <b>None</b>	

PART 4: DECLARATION	
I, the signatory, declare that the work described in this certificate was carried out in accordance with the provisions of BS 7671 and that the work was carried out in accordance with the provisions of BS 7671, except as detailed in Part 2 of this certificate.	
Name: <b>CHRIS PAXE</b>	Signature: <i>[Signature]</i>
Position: <b>Electrician</b>	Date: <b>3 November 2011</b>
Name of Client: <b>Walls Electrical Services Ltd</b>	
Address and Postcode: <b>Unit 1 Weycroft Avenue Amineter Devon EX13 5HU</b>	
NICEIC Worksafe logo: <b>0 1 3 2 2 3</b>	

This form is based on the notes of cover in Appendix B of BS 7671  
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Please see the 'Notes for Signatories' on the reverse of this page.

Original Certificate available from



### Test Certificate

Site: SITE CHT REMSYS  
Location: LOC. PRODUCTION

Asset: PPU2010038      Description: PPU2010038

Test	Result	Unit	Status
Visual			Pass
Earth Current	25	A	Information
Earth	0.07	Ohm	Pass
Insulation	>99.99	MOhm	Pass
Leakage	<0.1	mA	Pass
Load	0.07	kVA	Information

Comments:

Overall Status: Pass

Date Of Test: 26/10/2010

Signed By: 

SUPERNOVA TEST CERTIFICATE			
APPLIANCE: PPU2010038	DATE: 26/10/2010 18:04		
SITE: SITE CHT REMSYS	TEST SETTINGS:		
LOCATION: LOC. PRODUCTION	I1C700A021		
USER: ANDY	S131111111		
VISUAL	P   EARTH	0.07 Ohm P   INS	>99.99MChm P
LKGE	<0.10 mA P   LOAD	0.07 kVA P	
OVERALL STATUS: PASS			
SIGNATURE: 