

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

**AT**

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

**FOR**

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

**REF: 2385**

**DATE: 10<sup>th</sup> November 2011.**

**RETROSPECTIVE  
POSITIVE PRESSURE SYSTEM  
INSTALLATION REPORT**

**NAME:**

**ADDRESS:**

60 Marpool Drive  
Redditch  
Worcs.  
B97 4RX

**TELEPHONE NO:**

.....

**INSTALLATION NO:**

2385

**INSTALLATION  
DESCRIPTION:**

1 No. Positive Pressure Unit

**SERIAL NO:**

2010045

## 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.

## ZONE OF INFLUENCE RECORD

Date: .....10.11.11.....      Atm : .....1001 mb.....

| Location       | Levels Recorded |
|----------------|-----------------|
| V1             | 80              |
| V2 Input point | N/A             |
| V3 Input point | N/A             |
| V4             | 500             |
| V5             | 80              |
|                |                 |
|                |                 |
|                |                 |
|                |                 |

## GAS SAMPLE PORT READINGS

| Period  | Location | CH4%v/v | C02%v/v | 02%v/v |
|---|----------|---------|---------|--------|
| <b>Initial</b><br>8.11.11. 08.00              | V1       | 0.0     | 0.0     | 19.9   |
|   | V2       | 1.1     | 1.0     | 18.5   |
|   | V3       | 4.6     | 2.6     | 16.1   |
|   | V4       | 0.2     | 0.4     | 19.5   |
|   | V5       | 0.1     | 0.2     | 20.0   |
|   |          |         |         |        |
| <b>Commissioning</b><br>9.11.11. 11.00        | V1       | 0.1     | 14.2    | 3.8    |
|   | V2       |         |         |        |
|   | V3       |         |         |        |
|   | V4       | 19.0    | 12.6    | 1.5    |
|   | V5       | 6.3     | 10.6    | 2.4    |
|   |          |         |         |        |
| <b>Final Commissioning</b><br>10.11.11. 16.00 | V1       | 0.0     | 0.0     | 19.9   |
|   | V2       |         |         |        |
|   | V3       |         |         |        |
|   | V4       | 0.0     | 1.0     | 19.2   |
| 15.11.11. 08.00                               | V5       | 0.0     | 0.8     | 19.6   |
|   |          |         |         |        |



## FINAL INSPECTION CERTIFICATE

**EQUIPMENT DESCRIPTION**

1 No. Positive Pressure Unit

**SERIAL NUMBER**

2010045

**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   | √          |              |                 |



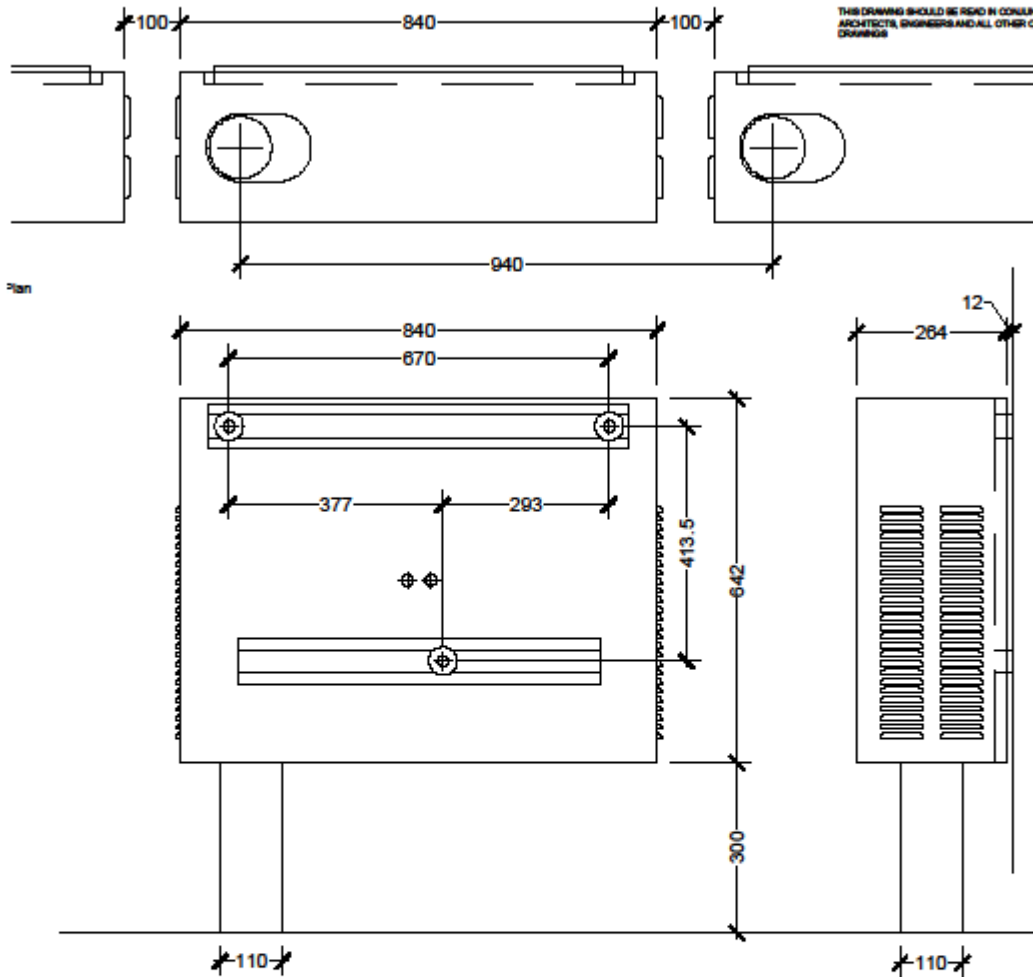
|     |  |   |  |  |
|-----|--|---|--|--|
|     |  |   |  |  |
|     |  |   |  |  |
|     |  |   |  |  |
|     | c) Fail 2 light Off  | √ |  |  |
| 11. | Running status by temporarily connecting power to unit with speed controller set on 5 and power supply switch off and Positive Pressure Unit switch 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

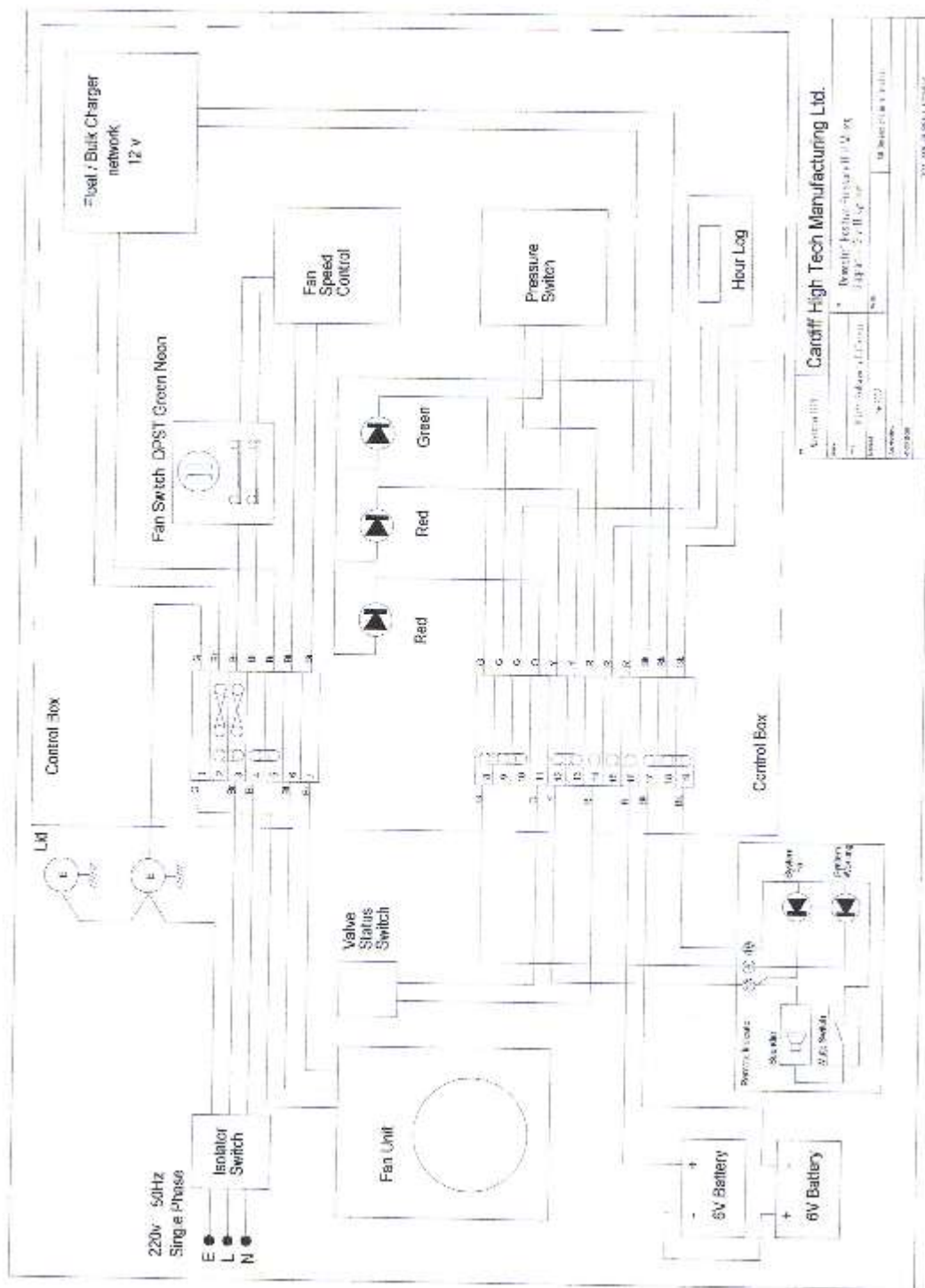
NOTE:  
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 ARCHITECTS, ENGINEERS AND ALL OTHER CONSULTANTS  
 DRAWINGS



Rear Elevation

Side Elevation

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



Company: **Caraff High Tech Manufacturing Ltd.**  
 Project: **High Tech Manufacturing Ltd.**  
 Drawn: **J. J. J.**  
 Date: **2023-01-15**  
 Scale: **1:1**  
 Revision: **1.0**

