

VISUAL INSPECTION & VERIFICATION OF GAS PROTECTION MEASURES

Site Name: <i>ASH ROAD WALTHAM</i>	Gas characteristic situation: <i>Soil gas beneath building</i>
Job number: <i>0905</i>	Type of Development and building / block checked: (residential/commercial/other) <i>INDUSTRIAL UNIT</i>
Date: <i>05-11-2021</i>	Building description: <i>UNIT 1 & 2 OFFICE AREAS</i>
Inspected by: <i>R GARRS</i>	Foundation type: (suspended floor/raft/other) <i>RAD FOUNDATION / SUSPENDED RC SLAB</i>
Weather at time of inspection: <i>Dry & cold</i>	Gas protection type: passive/active <i>PASSIVE</i>

No.	Item	Comments (see notes)
1 Gas Membrane		
1.1	Condition of sub-grade and underside of gas membrane	<i>even compacted stone</i>
1.2	Gas membrane type	<i>N/A</i>
1.3	Gas membrane condition	<i>N/A</i>
1.4	Jointing tape product	<i>N/A</i>
1.5	Lapping design	<i>N/A</i>
1.6	Laps, welds, and joint seals	<i>N/A</i>
1.7	Service entries seals	<i>N/A</i>
2 Passive venting		
2.1	Sub-floor void	<i>Geobond 52/96 vent strip installed</i>
2.2	External wall airbricks	<i>N/A</i>
2.3	Internal sleeper walls	<i>N/A</i>
2.4	External trenches / ducts	<i>N/A</i>
3 Active Venting		
3.1	System details	<i>N/A</i>

Additional notes:	<i>INSPECTION WAS OF PASSIVE DRAINS ONLY PRIOR TO COUGING DATA SHEETS ATTACHED</i>
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Notes: Inspection checklist

1.1	Underside gas membrane	Check that the sub grade does not contain rough uneven surfaces, is appropriately clean and that there are no hard / sharp objects. That protective sand blinding or geotextile if specified is present and meets design criteria?
1.2	Gas membrane type	Manufacturer and product specification, guage, colour, brand /name, material batch/roll numbers, storage arrangements (protected from dirt / damage)
1.3	Gas membrane condition	Open punctures, tears, rips, stretching? Excessive footprints, / evidence of traffic? Presence of debris? Repairs? Signs of weakness such as raised or sunken indentations? Protection plan in place to restrict access to lain gas membranes?
1.4	Jointing tape product	Product type, brand, thickness, material, width, colour? Use of double sided tape?
1.5	Lapping design	Joints lapped and sealed in accordance with manufacturers requirements / specification? Minimum overlap insured?
1.6	Laps and joints sealed	Welds complete? Appropriate joining / double sided tape used?
1.7	Service entries sealed	Top hats seal arrangements fixed around service entries?
2.1	Sub-floor void	Is a check possible? Void former? Gravel (type / specification)? Height of void space? Is is clear?
2.2	External wall airbricks	Numbers, size, positions and design drawing?
2.3	Internal sleeper walls	Ventillation holes (honeycomb brickwork/pipe crossings)? Size, spacing, location in accordnace with design?
2.4	External vent trenches / ducts	Located and conctructed in accordnace with design drawings? If open-toppedgravel - gravel type / presence of fines? If pipe or other vent, check position and construction for functionality and absnece of blockages. Ability to void formwer to withstand bearing of the superstructure?
3.1	Active venting	Type of air supply: mechanical, natural, combined? Location/condition/number of fans and vents? Location and size of inlets? Provision of air-cleaning devices and air heaters? Supply and exhaust ductwork? Alarm provision/installation? Gas monitoring system under-floor void?

Photographs

No.	Description
1	verts installed unit 1 office area
2	verts installed unit 2 office area

The gas protection measures inspected: A	A: Are acceptable and comply with the specification
	B: Are accpetable but attention is drawing to issues related to item no:
	C: Are not acceptable due to the issues related to item no:

Name: R Evans

Signature: 

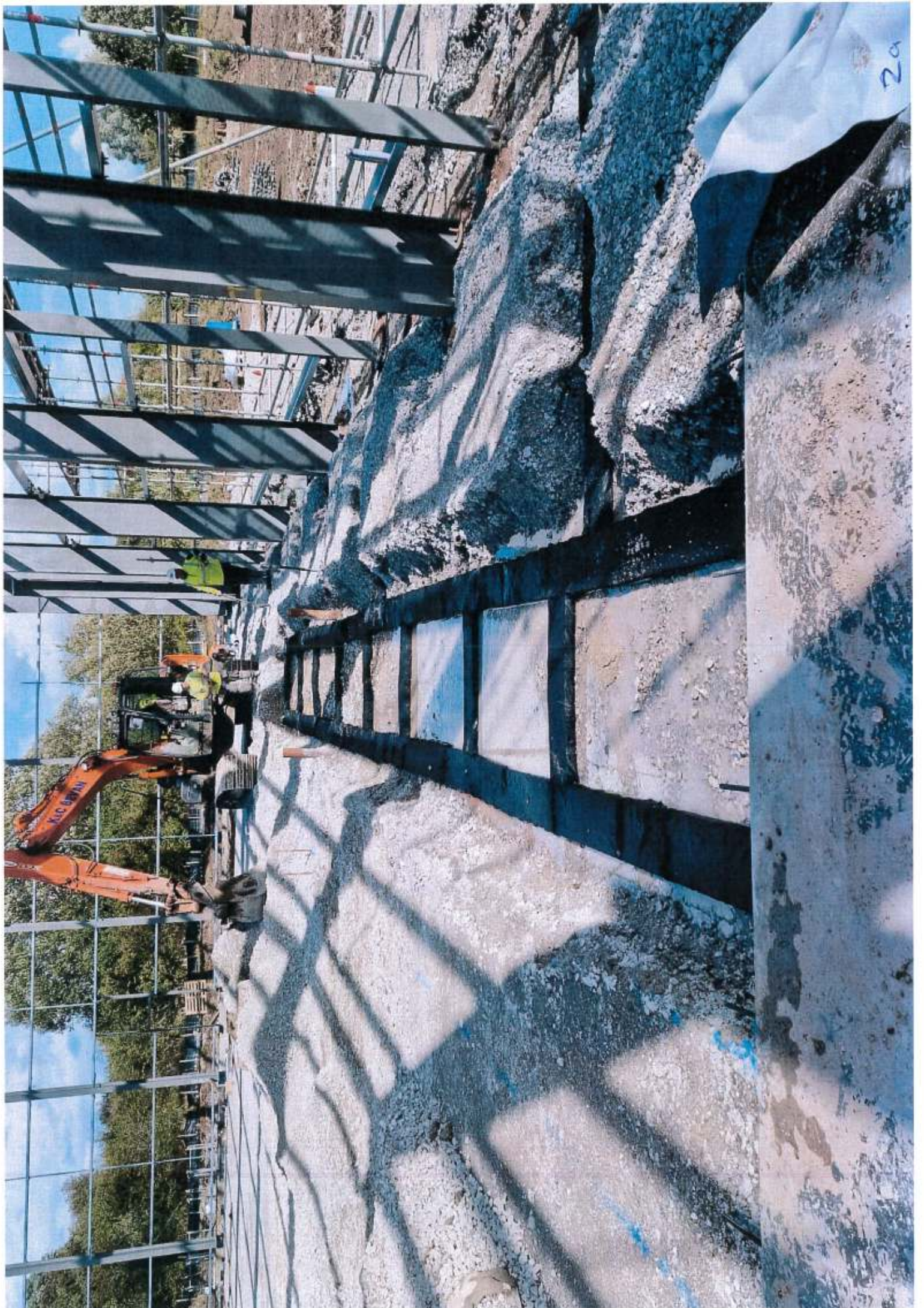
Date: 05.11.21

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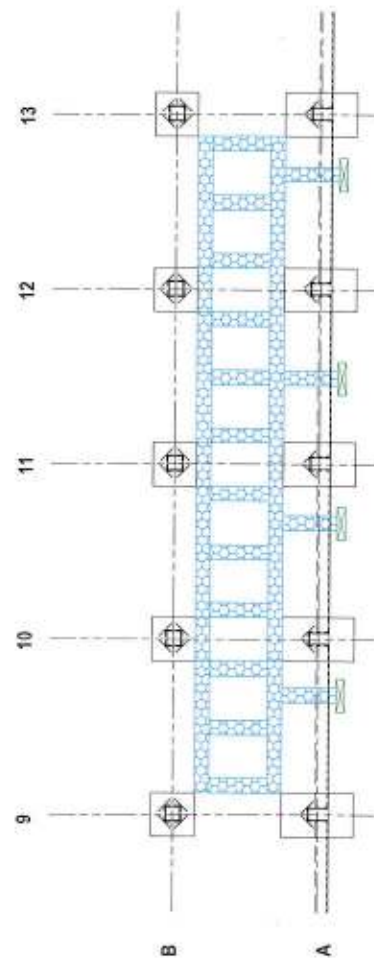


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 LDERBURGH 8000 WINDYBUSH DRIVE, SUITE 100 WINDYBUSH, AL 35142 TEL: 205-934-4100	
GAS VENTILATION SYSTEM	
Client:	NO
Project:	
Drawn By:	NI
Checked By:	
Title:	
ASH ROAD, SOUTH WREHAM, INDUSTRIAL ESTATE	
Scale:	Drawing No.:
NTS	00001

ALDERVENT Geo-Void 52/96

Geovoid 52/96 has been specifically designed to create large flow void space below structures constructed on contaminated land and where ground gas is a potential hazard; it is installed below the structural slab in or on top of the formation layer.

Key Features:

- Light weight yet heavy duty, 96% void matrix
- High Load Capacity to enable direct loading by site traffic
- Extremely high infiltration and flow rate capability
- Quick and simple to install
- Simple connections to all Aldervent inlet/outlet units.
- No maintenance cost
- Economic and Ecologically friendly

Description

Geovoid 52/96 is a modular void former installed in one operation to either cover the whole of the building footprint as a blanket or laid in strip form at design determined centres.

When installed as a blanket (full coverage), overlay Geovoid 52/96 with Geotex filter membrane before installing a gas barrier or laying the slab.

Geovoid 52/96 is frequently used in 260mm or 480mm wide strips, which are supplied ready wrapped in Geotex filter membrane for installation at predetermined centres.

The unique modular design and clipping system provide an extremely strong, heavy load-bearing void former that once installed is more than capable of supporting site traffic for slab installations (e.g. concrete wagons, laser pour vehicles).

Geovoid can be easily connected to perimeter gas collection systems, inlets and outlets to suit the site requirements – both for the amount of side ventilation needed and for aesthetic preferences.

Technical Data



Individual modules	480mm x 260mm x 52mm
Prewrapped strips	260mm x 2.40m x 52mm 480mm x 2.08m x 52mm
Loading / Crush strength	1457 kN/m ²
Void Ratio / Porosity	96%
Intrinsic permeability k/m ²	2.4 x 10 ⁻⁴
Equivalent clear void	44.7mm

Geovoid 52/96 allows for the rapid dilution and safe dispersal of land borne gases from beneath the building footprint, allowing for complete flexibility in foundation design.

Aldervent Geo-void 52/96 has been CFD modelled in line with recommendations and tests undertaken for the DOE Partners in Technology report "Passive Venting of Soil Gases Beneath Buildings Research report Design Guide 1997".

Geovoid 52/96 unique void ratio and flow capability means that it can often be used in strips and yet provide a more efficient ventilation system than many blanket void systems. This makes Geovoid 52/96 extremely cost efficient and economical in use.

Where developments are considered on sites with extremely high gas emission figures active upgrades and gas monitoring systems can be attached to the designed passive systems if required.

Installed as a full blanket to cover the footprint of the building, **Geovoid 52/96** provides a totally unique high permeability, high flow rate, high strength medium for the safe dilution and dispersal to atmosphere of all land borne gases from beneath any building footprint, even when considerations for high emitting gas volumes have to be calculated.

Geovoid 52/96 extremely high 1400 kN/m² crush strength make it the ideal solution to under slab venting on fast-track operation sites, particularly when laser pouring; **Geovoid 52/96** is more than capable of absorbing the loading from concrete vehicles.

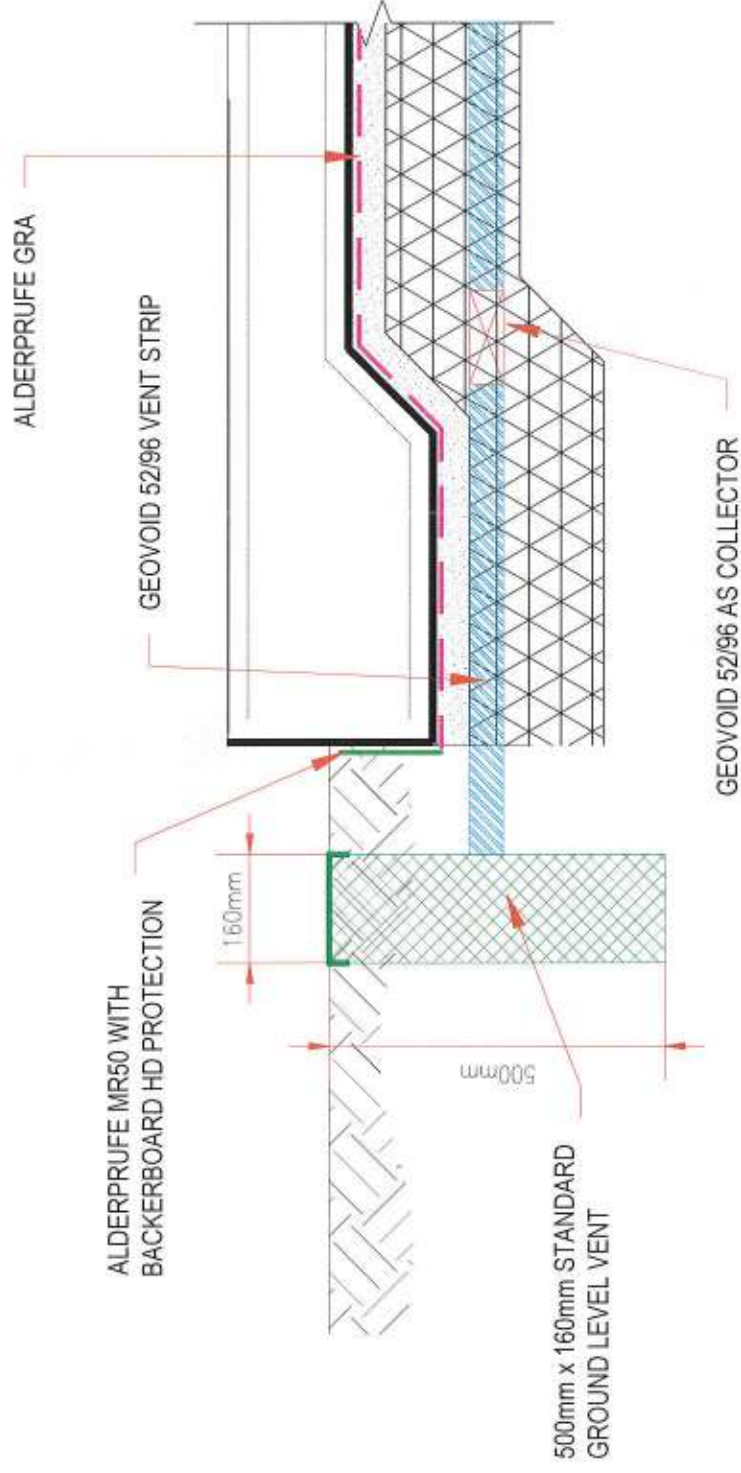
Geovoid 52/96 has an in-built clipping system which creates an extremely stable robust base and platform for following trades to work on with no lateral movement from the system.

Geovoid 52/96 can be easily connected to perimeter gas collection systems, inlets and outlets to suit the site requirements – both for the amount of side ventilation needed and for aesthetic preferences.

Geovoid 52/96 has been CFD modelled in line with recommendations and tests undertaken for DOE Partners in Technology Report Passive Venting of Soil Gases Beneath Buildings Research Report Design Guide 1997.

Use with: Aldervent Periscope Vents * Ground Level Vents * Thin Vents * Vertical Riser Vents * Alderprufe Gas Barrier systems





TYPICAL GROUND LEVEL VENT EDGE DETAIL

LDERBURGH
Solutions. Made. Clear. Simple. Sustainable. ELLIOTT
Tel: 01753 311133

Project: GAS VENTILATION SYSTEM
Title: TYPICAL GROUND LEVEL VENT EDGE DETAIL
Drawn By: ME
Checked By: KD

Scale: NTS
Drawing No: -
Date: -
Title: ASH ROAD, SOUTH WIRREHAM INDUSTRIAL ESTATE