



GEOSHIELD

Verification Report



PROJECT REFERENCE: GEO101021

REPORT NUMBER: 007 REPORT DATE: 01/06/2020

PROJECT: McAleer & Rushe

PROJECT ADDRESS: 101 Charles Street

Manchester

M1 6DD

MEMBRANE SPECIFICATION: Gas membrane to specification BS8485 2015

Installed to CIRIA 735

Visqueen Geoseal Ultimate

Visqueen GR SAM

Visqueen HP Tanking Primer

Visqueen Retaining Discs

Visqueen Protect and Drain



GEOSHIELD Verification PLAN



SPECIFICATION:

DRAWINGS ISSUED

S1010_Foundation GA_S5-4

Section 32 - Service Trench

TR-10227-A-G251-DE-E1-001

TR-10227-A-G251-DE-E1-002

TR-10227-A-G251-DE-E1-003

TR-10227-A-G251-DE-E1-007_P2

TR-10227-A-G251-DE-N1-001

TR-10227-A-G251-DE-S1-001

TR-10227-A-G251-DE-W1-001

TR-10227-A-G251-DE-W2-001

TR- Central Core V2

Information presented to at the pre-verification stage assumed correct

Any change client will let GeoShield know or this Pre-verification Plan will be void.



GEOSHIELD Verification Report



VERIFICATION OFFICER: Finlay Todd

VERIFICATION COMPANY: GeoShield Limited

Icon Business Park, 4100 Park Approach

Thorpe Park, LEEDS

West Yorkshire

LS15 8GB

CONTACT NUMBER: 07555214679

EMAIL ADDRESS: Ftodd@geoshield.co.uk

ORDER NUMBER:

PER VISIT: YES:



NO:



PROJECT: YES:



NO:





GEOSHIELD

Verification Report



CLIENT DETAILS

CLIENT CONTACT:	Andy Collins
CONTACTS ROLE:	Prestige Air
MOBILE PHONE:	07789223116
EMAIL ADDRESS:	Andy@prestigeair.com



CLIENT CONTACT:	
CONTACTS ROLE:	
MOBILE PHONE:	
EMAIL ADDRESS	
NOTES:	
NOTES:	
NOTES:	



GEOSHIELD Verification Report



APPLICATION TEAM LEADERS

APPLICATOR NAME: Lee Barnes, Kristoph,

COMPANY: Prestige Air

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:

NOTES:

NOTES:

NOTES:



GEOSHIELD Verification Report



AREA SURVEYED: Grid lines 1-6/E-G

West toe detail

SITE CONDITIONS:

WEATHER: Sunny

TEMPERATURE: 18C

MEMBRANE TEMPERATURE: N/A

RELATIVE HUMIDITY:

TIME: 11:00/12:30

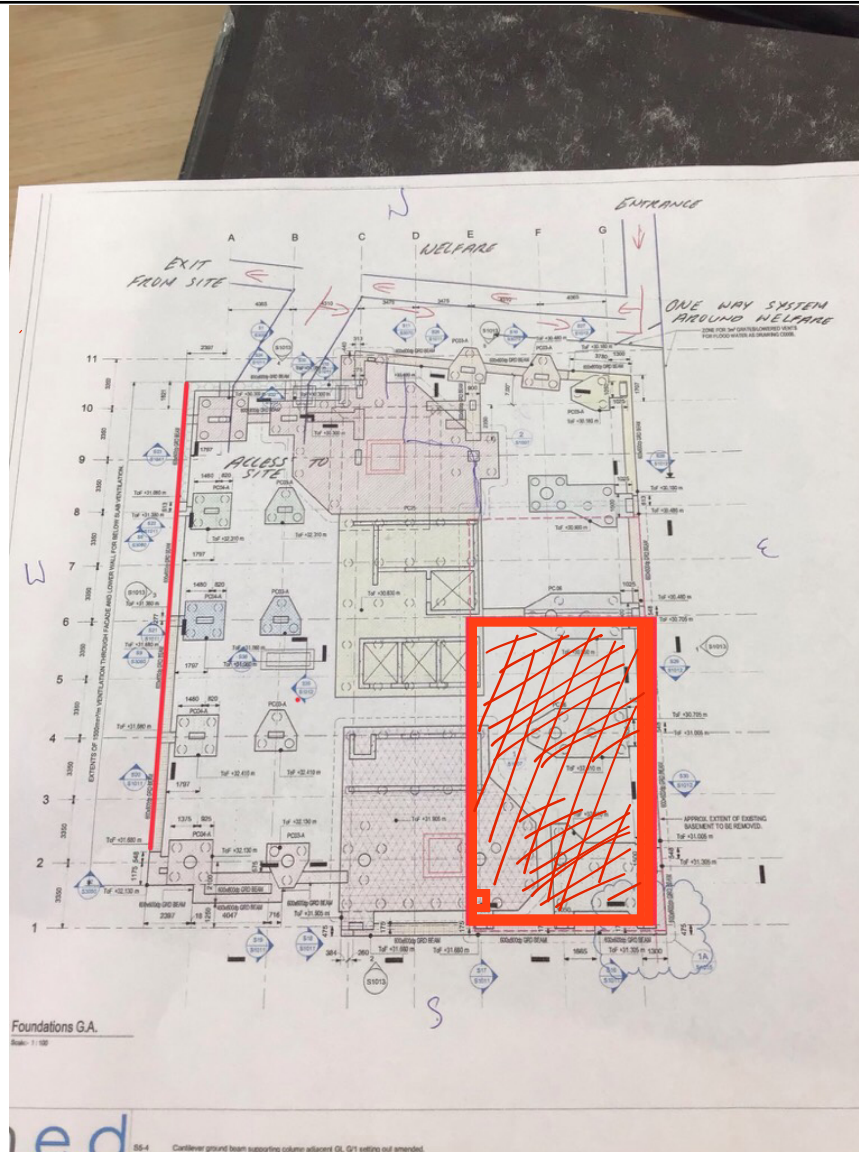
REPORT NUMBER: 007

DATE: 01/06/2020

ACCOMPANIED Kristoph

GEOSHIELD Verification Report

VERIFICATION LAYOUT



Area highlighted GL 1-6/E-G and West Toe Detail verified on this visit.



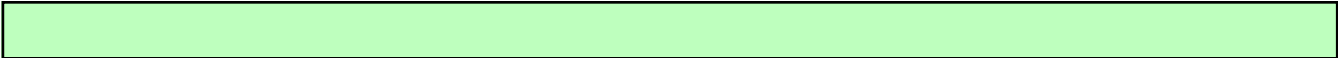
GEOSHIELD Verification Report



OVERVIEW PHOTOGRAPHS



Overview of verified area





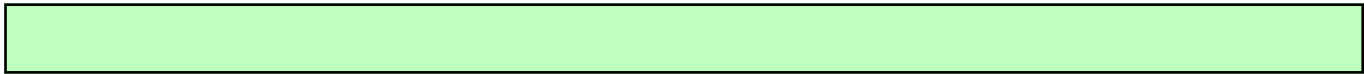
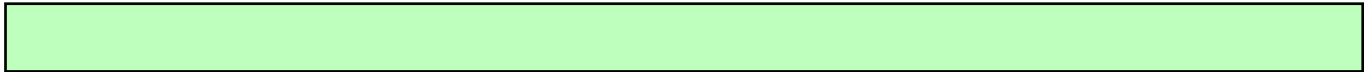
GEOSHIELD Verification Report



OVERVIEW PHOTOGRAPHS



Overview of verified area



GEOSHIELD Verification Report

BGA
British Geomembrane Association



VERIFICATION ITEM ONE

LOCATION/GRID LINE: Gridlines 1-6/E/G

NOTES: Visqueen Ultimate Geoseal has been applied to a large area within the grid lines given above. It has been extrusion welded on every joint to ensure that a good bond has been created. A pick and probe was carried out on welds, however due to limitations it wasn't possible to check all.



Left photo) Visqueen Geoshield Ultimate, with extrusion weld on joint.

Right photo) Overview of membrane with concrete spacers holding the rebar above it.

GEOSHIELD Verification Report

VERIFICATION ITEM ONE



Above photo) this show a pick and probe test being carried out on the extrusion weld, which has been carried out on the overlap of Visqueen Geoshield Ultimate. Due to the rebar already been installed pick and probe tests couldn't be carried out on every weld.



GEOSHIELD Verification Report



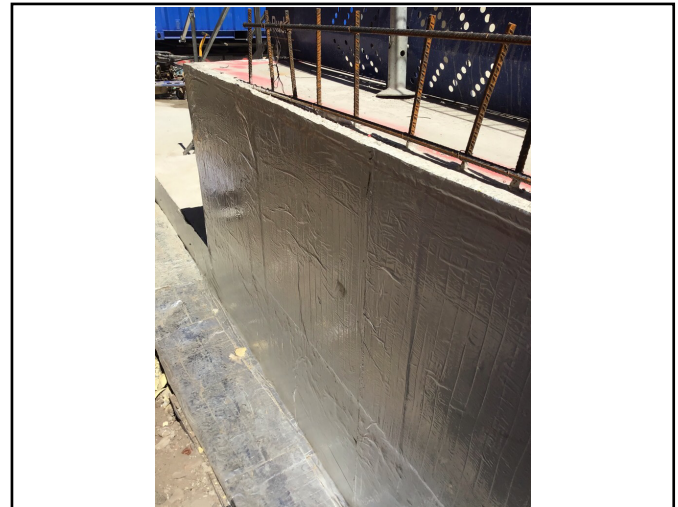
VERIFICATION ITEM TWO

LOCATION/GRID LINE: West Toe Detail

NOTES: Gas Resistant Seal Adhesive Membrane has been

applied to the length of the western toe detail. A pick and probe test was carried out

on the overlaps to ensure that a good seal has been created.



Left photo) overview of Western Toe Detail, which as had GR SAM applied to it by the installers.

Right photo) GR SAM applied to Western Toe Detail.

GEOSHIELD Verification Report

VERIFICATION ITEM TWO



Above photo) a pick and probe test was carried out on the GR SAM that has been

applied to the Western Toe Detail. The length of the toe was firstly coated with

Bitumen primer, a good seal was created across the whole verified item.

GEOSHIELD Verification Report



VERIFICATION ITEM THREE

LOCATION/GRID LINE: Membrane Hooks

NOTES: This item is a follow on from the previous visit, hooks have been extrusion welded to the Visqueen Ultimate Geoseal as per manufacturers design. Wire has then been threaded through the loop on the hook and tied to the rebar which has been installed on the insulation covering the membrane.



Left photo) this is an overview of the Visqueen Ultimate Geoseal which has been covered with hooks and the extrusion welded to the membrane.

Right photo) close up of a welded hook.

GEOSHIELD Verification Report

VERIFICATION ITEM THREE



Above photo) this show wire that has been tied to the steel rebar sitting on top of the insulation. The insulation has been laid on top of the membrane. The other end of the wire is tied to the hook attached to the membrane.



GEOSHIELD Verification Report



GAS MEMBRANE TESTING

VISUAL:	☐ YES	☒	☐ NO	☐	SMOKE TEST:	☐ YES	☐	☐ NO	☒
COMPRESSED AIR:	☐ YES	☐	☐ NO	☒	DILECTIC	☐ YES	☐	☐ NO	☒
DESTRUCTIVE:	☐ YES	☐	☐ NO	☒	OTHER:	☐ YES	☒	☐ NO	☐
Testing checklist attached:	☐ YES	☐	☐ NO	☐					

Gridline/Plot Sign off

Gridline/Plot Sign off	Crane Base edges and Core edge	☒
Gridline/Plot Sign off	Pile Cap on A10 and B6	☒
Gridline/Plot Sign off	Core on D5	☒
Gridline/Plot Sign off	Core on D7	☐
Gridline/Plot Sign off	Gridline 5-10 A-C	☒
Gridline/Plot Sign off	Gridlines 7-9.5 and A-D	☒
Gridline/Plot Sign off	Gridlines 10.5-11 and A-D	☒
Gridline/Plot Sign off	Gridlines 9-10.5 & A-D	☒
Gridline/Plot Sign off	Gridlines 1-2 & A-C	☒
Gridline/Plot Sign off	Gridlines 11/6:E/G	☐
Gridline/Plot Sign off	Gridlines 6/4:A/C	☒
Gridline/Plot Sign off	Ring beams to 3/1:E/G	☒

GEOSHIELD Verification Report

ADDITIONAL PHOTOGRAPHS



Wire ties holding the membrane
to the rebar.



GR SAM applied to Western

Toe Detail



Extrusion weld on Visqueen

Geoshield Ultimate



Western Toe Detail.



GEOSHIELD Verification Report



VERIFICATION SUMMARY

A visual inspection was first carried out to make sure there was no holes or puncture marks that could compromise the membrane. Extrusion welds were checked with a pick and probe test, as was the Gas Resistant Self Adhesive Membrane which has been applied to the Western Toe Detail. Pipe penetrations were also verified with a pick and probe test. No remediations were found due to limitations caused by the rebar already being installed.

All complete works passed and verified in accordance with BS8485:2019 and CIRIA 735.

GEOSHIELD SIGNATURE:

DATE: 01/06/2020