

Multi-Purpose Gas Membrane Installation Plan.

Document No. mpgm010726v1

Date: 1st July 2026

Client: The Trustees of The Alitex DBSSAS

Site Address: 2-6 Seagull Lane Emsworth PO10 7QH

Project Co-ordinator: Nick Bashford - Nyetimber Management Ltd

Multipurpose Gas Membrane Type: Visqueen NF 400

Membrane Installers: Crouch Construction Ltd

Independent Verification Specialist: GeoShield Ltd

Table of Contents

1. INTRODUCTION	
1.1 Supporting Documents	2
2. PROJECT OVERVIEW	
2.1. New Light Industrial Buildings	3
2.2. Gas Membrane Requirements	3
2.2.1. Gas Membrane – Product	3
3. INSTALLATION SEQUENCE	
3.1. Basic Project Build Sequence	4
3.2. Third Party Validation	4
3.3. Stage 1 – Membrane Installation. DPC Level	4
3.4. Stage 2 - Membrane Installation. Beneath Floor Slab	4
4. PRODUCT INSTALLATION GUIDELINES	
4.1. Tape Width Selection & Application – Overview	5
4.2. Best Practices for Installation	5
4.3. Steel Column Detailing	6
4.4. Service Pipe Detailing	6
4.5. Critical Installation Checklist	6
Appendix A: Technical Datasheet Visqueen NF-400	7
Appendix B: PWP Architects DWG 6000E Details Sheet	13
Appendix C: PWP Architects Section DWG 4300E, 4302D & 4303D	15
Appendix D: NF400-92 Taped Joint Detail (inc, 50mm, 60mm & 150mm Tape)	19
Appendix E: Visqueen Preformed Units	30
Appendix F: Visqueen NF-Detailing Strip, 300mm	35
Appendix G: NF400-82 Steel Column Detailing	39
Appendix H: NF400-81 Service Pipe Detailing	41
Appendix I: PWP Architects DWG 1010F Proposed Site Plan	43
Appendix J: ANP Engineers DWG 101, 102 & 103 General Arrangements (all units)	45

1. INTRODUCTION

1.1. Supporting Documents

This document is a guide to the installation method and has been produced in line with the following product sheets and drawings:

- PWP Architects.
DWG's 1000-2000 series 19.08.2025
DWG's 3000-4000 series 19.08.2025
DWG's 6000-9000 series 19.08.2025
- Ground & Water Ltd
Remediation Strategy and Verification Plan. Report Ref: GWPR6838/RS&VP/June 2026
- ANP Structural & Civil Consulting Engineers
DWG's 100A – 103-02 May2025
- Visqueen Ltd
NF400 Data Sheets & Product Installation Guides.
- GeoShield Ltd
Verification plan is supplied separately.

For general reference, the Appendices within this document include several key drawings from the above list. The installers have been supplied a full set of working drawings.

If you require additional drawings that are not included within this pack, please contact the Project Co-ordinator. Nick@nyetimbermanagement.co.uk

2. PROJECT OVERVIEW – Multipurpose Gas Membrane

2.1. New Light Industrial Buildings

The construction of 3 new industrial type buildings. Typically, steel framed construction and fitted with insulated cladding sheets. Buildings to be sub-divided into 8 small self-contained units offering between 100m² - 120m² per unit including mezzanine floor.

2.2. Gas Membrane Requirements.

The RMS report states the following (abbreviated to highlight basic product performance requirements): Full report has been circulated to all parties and is available on request.

- *3.4. Remediation Strategy Relating to Ground-Gas, Vapours and Radon*
Based on risk assessment undertaken, the site warrants classification as Characteristic Situation CS2, where precautions to prevent the ingress of ground-gas are necessary.
- *3.4.2. Multi-Purpose Membrane*
The multi-purpose membrane, protecting against ground-gas, water ingress, vapours and radon, should meet the following criteria outlined within Table 7 of BS 8485:2015+A1:2019, repeated below. Where an alternative product is used, it must be demonstrated by laboratory testing that the alternative product achieves or exceeds the performance characteristics of the product originally agreed. The installation can utilise taped joints (a metallic core vapour-resistant barrier product is not required) and to be installed by a competent contractor and verified by a suitably trained independent party, generally following C735 guidance.

2.2.1 Gas Membrane – Product.

Technical Datasheet Visqueen NF-400 (extract below) Appendix A

Features & benefits

- *BDA Agreement Certification - third party accreditation*
- *Complies with NHBC Foundation NF94 guidance for use in Type A membrane locations - non foil system*
- *Complies with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019 - industry standard for methane and carbon dioxide protection*
- *Transparent - allows a clear view of the substrate during and post installation*
- *Multi-functional - also acts as a radon and damp-proof membrane*
- *Dual jointing methods - depending upon specification, lap joints can be heat welded or taped*

3. INSTALLATION SEQUENCE

3.1. Basic Project Build Sequence

The proposed sequencing (in its most basic form) highlights the stages for the membrane installation. This is a two-part process that offers much better overall protection measure to the membrane itself during the construction phases.

- Phase 1
Excavation, install service ducts & mass fill strip & pad foundations with concrete.
- Phase 2
Construct low level perimeter walls and install Gas Membrane at DPC level only.
- Phase 3
Install steel portal frames and roof sheets (to provide protection from weather)
- Phase 4
Install insulation and Gas Membrane across complete floor area, encasing steel frames and service ducts.
- Phase 5
Form structural slab and mass fill with concrete. Power floated finish.

3.2. Third Party Validation

The gas membrane installation is to be independently verified by GeoShield Ltd. This includes the Pre-Verification Plan, Inspection site visits/reports and handover documentation.

3.3. Stage 1 – Membrane Installation. DPC level

The membrane is to be positioned within the outer brick work of the perimeter walls as per Architects DWG 6000E Details sheet. *Appendix B*

Adequate excess (for overlap) must be maintained to successfully tape a joint to the main membrane after the installation of the portal Steel frames and prior to the forming of the slab.

3.4. Stage 2 – Membrane Installation. Beneath floor slab

Door threshold details are as per Architects section DWG 4300E, 4302D & 4303D. *Appendix C*

4. PRODUCT INSTALLATION GUIDELINES

For more detail see Appendix D, E, F, G, H for Visqueen technical sheets.

<https://visqueen.com/assets/pdf-downloads/visqueen-product-guide-april-2026.pdf>

4.1. Tape Width Selection & Application - Overview

When sealing ground gas membranes, choose the tape based on the specific joint or repair type. Use **150mm tape** for sealing standard membrane overlaps, corner junctions, and punctures, or **60mm tape** for securing detailing accessories and terminating to damp-proof courses (DPC). *Appendix D*

Tape Width Selection & Application:

150mm Tape (Visqueen NF-150 Lap Tape):

- **Primary Use:** Standard over-banding of membrane joints/laps (overlaps should be a minimum of 150mm as standard practice).
- **Punctures & Tears:** Ideal for patching holes. You should clean the area to a minimum of 150mm around the hole and apply a patch that extends at least 150mm beyond the tear.

60mm Tape (Visqueen NF-60 Lap Tape):

- **Primary Use:** For applications such as sealing accessories, securing detail strips, or preventing wet screed/concrete from seeping under membrane laps before double-sided tape bonding.

4.2. Best Practices for Installation

Regardless of the width you choose, always follow these steps to ensure gas tightness:

- **Preparation:** Clean membrane surfaces to remove all dust, grease, moisture, and loose debris.
- **Application:** Ensure the tape is applied without tension.
- **Consolidation:** Always use a silicone or hand seam roller to apply firm pressure and remove any trapped air, creases, or bubbles.

When sealing corners using the Visqueen Gas Barrier NF-400 system, you can achieve gas-tight joints using either system tapes or preformed corner units.

Using Preformed Corner Units: *Appendix E*

For the most secure, gas-tight installation at internal and external wall-to-floor junctions, Visqueen recommends using Visqueen Preformed Corner Units.

- **The Tape Setup:** Position Visqueen Pro Double-Sided Jointing Tape (50mm wide) onto the flange of the preformed corner unit.
- **The Overlap:** Lap the NF-400 membrane over the corner unit by a minimum of 100mm.
- **The Seal:** Peel back the release film and press the membrane firmly onto the double-sided tape.
- **The Outer Layer:** Seal the exposed edges of the joint using Visqueen NF-60 Lap Tape (60mm wide) or Visqueen NF-150 Lap Tape (150mm wide).

Using System Tapes (For Hand-Formed Corners):

If you are manually forming the corner junctions using the membrane sheet itself, you must ensure there are no wrinkles or tension in the material.

- **Internal Joints:** Apply the 50mm double-sided tape roughly 25mm back from the sheet edge. Roll down firmly. Appendix D
- **Over-banding Folded Corners:** Because hand-formed corners involve folding thick 400-micron material, use Visqueen NF-150 Lap Tape (150mm) to over-band all external cuts and lap folds. The 150mm width provides the mandatory extra coverage needed to span across multi-layered, uneven folded seams.
- **Detailing Options:** Alternatively, you can use Visqueen NF-Detailing Strip (300mm wide) to cover complex corner junctions. *Appendix F*

4.3. Steel Column Detailing

See Appendix G

4.4. Service Pipe Detailing

See Appendix H

4.5. Critical Installation Checklist

- **Temperature Limit:** Ensure the air temperature is **5°C and rising**. Cold surfaces lead to condensation, which causes the tape to fail.
- **Mechanical Compaction:** You must use a **40mm silicone hand roller** or a brass penny roller to heavily compress the tapes. Hand pressure alone is insufficient to clear air pockets and secure a gas barrier seal.
- **Cleanliness:** Ensure the NF-400 lap area is totally clean, dry, and dust-free before unrolling any tape

APPENDIX A:
Technical Datasheet
Visqueen NF-400

Visqueen Gas Barrier NF-400

Features & benefits

- BDA Agreement Certification - third party accreditation
- Complies with NHBC Foundation NF94 guidance for use in Type A membrane locations - non foil system
- Complies with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019 - industry standard for methane and carbon dioxide protection
- Transparent - allows a clear view of the substrate during and post installation
- Multi functional - also acts as a radon and damp proof membrane
- Dual jointing methods - depending upon specification, lap joints can be heat welded or taped

Product description

Visqueen Gas Barrier NF-400 is a co-extruded, multi-layer thermoplastic gas membrane, 0.4mm thick (400 micron). The membrane is transparent with a blue tint and supplied 2.4m x 43.5m in a single wound roll.

Approvals and standards

- Third party accreditation (BDA Agreement Certificate BAB-24-339-P-A-UK)
- Complies with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019
- Suitable for all Characteristic Gas Situation (CS) ground gas regimes
- Complies with NHBC Foundation NF94 guidance for use in Type A membrane locations (non foil system)
- Conforms to the specification requirements of NHBC Amber 1 and Amber 2 applications
- Conforms to the specification requirements of BR 211:2023
- UKCA UKNI CE to EN 13967:2012
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

Visqueen Gas Barrier NF-400 is suitable for use in all types of buildings to prevent the ingress of harmful levels of methane, carbon dioxide and radon.

The barrier can be positioned above or below reinforced cast in situ concrete floor slabs e.g. ground bearing, suspended or raft, or above precast suspended segmental subfloors, e.g. beam and block floor.

The barrier can also be used as a high performance radon membrane and/or damp proof membrane.

NHBC NF94 guidance: Radon, carbon dioxide, and methane protection

Visqueen Gas Barrier NF-400 when installed with either welded or taped joints complies with NHBC Foundation NF94 publication, Hazardous ground gas - an essential guide for housebuilders, in Type A membrane locations in precast suspended segmental subfloors and reinforced cast in situ concrete floor slabs (ground bearing, suspended or raft).

For site or zone characteristic gas situations of CS4 and above, contact Visqueen Technical Office.

The barrier is not intended for use where there is a risk of hydrostatic pressure.

System components

- VisqueenPro Double Sided Jointing Tape, 50mm x 10m
- VisqueenPro Detailing Strip, 300mm x 10m
- Visqueen TreadGUARD 1500, 1m x 2m
- Visqueen TreadGUARD 300, 2m x 75m
- Visqueen Ultimate Top Hat Units
- Visqueen NF-Detailing Strip, 300mm x 10m
- Visqueen NF-60 Lap Tape, 60mm x 45m
- Visqueen NF-150 Lap Tape, 150mm x 10m

Storage and handling

When storing Visqueen Gas Barrier NF-400 care should be taken to:

- store in its original packaging;
- avoid exposure to direct sunlight and high or low temperatures for prolonged periods of time;
- store in a well-ventilated covered area to protect from rain, frost, humidity and mechanical damage;
- store away from possible ignition sources;
- store rolls of the barrier horizontally on a flat surface and not stacked.

Care should be taken to avoid accidental damage to the product when handling on site.

Care should be taken when handling the product in line with current manual handling regulations.

Visqueen Gas Barrier NF-400

Preparation

Visqueen Gas Barrier NF-400 should be installed on a smooth continuous surface e.g. grouted beam and block floor, a compacted blinding layer e.g. 50mm thick sand blinding, or smooth concrete blinding. The substrate should be free from irregularities such as loose aggregates or other sharp protrusions, voids, projections or mortar deposits.

The barrier can be cut with a sharp retractable safety knife or robust scissors.

Hand rollers are required during lap joint formation and sealing membrane detailing. Typical hand rollers include 40mm silicone pressure roller and 6mm brass penny pressure roller.

Consult the project specification to ensure the correct method of lap joint formation for the project is followed (welded or taped).

Rolls of tape should be kept in a warm, dry location prior to use to ensure the tape is workable and can be more easily applied.

Installation

Installation of Visqueen Gas Barrier NF-400 should be carried out by a competent contractor experienced with this type of product e.g. hold an NVQ Level 2 Diploma in substructure work occupations (Installation of Gas Membranes - Construction).

The installation should be subjected to third-party validation in accordance with BS 8485:2015 +A1:2019 and CIRIA C735.

Visqueen Gas Barrier NF-400 should be loose laid on the substrate ensuring that the barrier sheet edges are aligned allowing adequate overlap for jointing between the sheets. The barrier can be laid either side facing upwards.

The barrier lap area should be clean and dry at the time of jointing. The barrier has been designed to exhibit superior welding properties using hot wedge and hot air welding, therefore onsite welding of all lap joints is recommended. When hot air hand welding the lap joints, the joint should be overlapped by approximately 100mm and an approximate 35mm weld is normally achieved. During hand welding, the lap joints should be firmly compressed using a hand roller to ensure an adequate bond is achieved.

When taping the lap joints, the joint should be overlapped by approximately 100mm and bonded with VisqueenPro Double Sided Jointing Tape (positioned approximately 25mm from the edge of the sheet) and sealed with Visqueen NF-60 Lap Tape or Visqueen NF-150 Lap Tape depending on the project specification. The lap joints should be firmly compressed using a hand roller during taping to ensure an adequate bond is achieved.

Creating an effective gas barrier often requires complex three-dimensional detailing, such as around internal and external walls, corners, doorway thresholds, service pipes, party walls, and structural columns. Visqueen Detailing Strip (Pro or NF depending on the project specification) is gas resistant and can be used in place of the gas barrier to maintain continuous protection. The detailing strip lap joints should be firmly compressed using a hand roller to ensure an adequate bond is achieved. Visqueen Ultimate Preformed Units are also available.

If the barrier is punctured or perforated a patch of the same material should be lapped at least 100mm beyond the limits of the puncture and either welded in position, or bonded with VisqueenPro Double Sided Jointing Tape (positioned approximately 25mm from the edge of the sheet) and sealed with Visqueen NF-60 Lap Tape or Visqueen NF-150 Lap Tape depending on the project specification. Alternatively a patch can be formed using Visqueen NF-Detailing Strip lapped at least 150mm beyond the extents of the puncture.

Long periods of exposure to ultraviolet light will reduce the effectiveness of the barrier. The barrier should be covered by a protective layer e.g. Visqueen TreadGuard protection or other approved protection material, immediately after installation to prevent damage from following trades, ultraviolet light, etc. Care should be taken to ensure that the barrier is not punctured, stretched or displaced during or post installation.

VisqueenPro Detailing Strip is also suitable for sealing detailing junctions and patch repairs, however when the gas protection measures are to conform with the requirements of NHBC NF94 guidance, please ensure acceptance by all stakeholders prior to use.

Usable temperature range

When Visqueen Gas Barrier NF-400 is installed with taped lap joints, the air temperature should not be below 5°C or falling to prevent the risk of surface condensation affecting the tape adhesion.

When ambient temperatures are above 25°C or rising, the barrier should be covered immediately after installation.

Additional information

When used in accordance BS8485:2015 + A1:2019 a subfloor ventilation system or pressure relief may also be required.

To assist build sequencing, Visqueen Ultimate Gas DPC is available for gas protection through the wall

Visqueen Gas Barrier NF-400

construction.

For further information contact Visqueen Technical Office on 0333 202 6800.

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

Property	Test method	Units	Compliance criteria	Result
Dimensions	BS EN 1848-2	m	-	2.4 x 43.5
Nominal thickness	BS EN 1849-2	mm	+/-10%	0.4
Mass	BS EN 1849-2	g/m ²	>370	>370
Tensile strength - machine direction	BS EN 12311-2 method B	N/mm ²	MDV	26.3
Tensile strength - cross direction	BS EN 12311-2 method B	N/mm ²	MDV	29.4
Elongation at break - machine direction	BS EN 12311-2 method B	%	MDV	607
Elongation at break - cross direction	BS EN 12311-2 method B	%	MDV	921
Joint strength - taped joint	BS EN 12317-2	N/50mm	MDV	217
Joint strength - welded joint	BS EN 12317-2	N/50mm	MDV	405
Watertightness at 2kPa for 24 hours	BS EN 1928 method A	-	Pass/Fail	Pass
Watertightness at 2kPa for 24 hours after ageing	BS EN 1296 (12 weeks) + BS EN 1928 method A	-	Pass/Fail	Pass
Watertightness at 2kPa for 24 hours after alkali environment	BS EN 1847 (28 days) + BS EN 1928 method A	-	Pass/Fail	Pass
Resistance to impact	BS EN 12691 method A	mm	MDV	400
Low temperature flexibility	BS EN 495-5	°C	MDV	-20
Resistance to tearing (nail shank) - machine direction	BS EN 12310-1	N	MDV	265
Resistance to tearing (nail shank) - cross direction	BS EN 12310-1	N	MDV	240
Water vapour resistance	BS EN 1931 method B	MNs/g	MDV	2,296
Water vapour permeability	BS EN 1931 method B	g/m ² /d	MDV	0.08
Water vapour resistance factor	BS EN 1931 method B	μ	MDV	1,140,000
Water vapour diffusion equivalent air layer thickness	BS EN 1931 method B	SD in m	MDV	459
Methane gas transmission rate - membrane	BS ISO 15105-1	ml/m ² /day/atm	MDV	13.2
Methane gas transmission rate - welded membrane joint	BS ISO 15105-1	ml/m ² /day/atm	MDV	15
Carbon dioxide gas transmission rate	BS ISO 15105-1	ml/m ² /day/atm	MDV	22
Radon gas transmission rate - membrane	SP method	m/s	MDV	<3.0 x 10 ⁻⁹
Puncture CBR	BS EN 12236	N	MDV	1620
Tensile yield strength - machine direction	ASTM D4885-01	kN/m	MDV	8

Visqueen Gas Barrier NF-400

Tensile yield strength - cross direction	ASTM D4885-02	kN/m	MDV	7.3
Resistance to static loading	BS EN 12730 method C	kg	MDV	15
Elongation yield - machine direction	ASTM D4885-01	%	MDV	405.3
Elongation yield - cross direction	ASTM D4885-01	%	MDV	400.2
Tear resistance - trouser method A - machine direction	BS ISO 34-1	kN/m	MDV	128
Tear resistance - trouser method A - cross direction	BS ISO 34-1	kN/m	MDV	109.7
Tear resistance - angle method B - machine direction	BS ISO 34-1	N	MDV	137
Tear resistance - angle method B - cross direction	BS ISO 34-1	N	MDV	139.6

Health and safety information

Refer to the Visqueen Gas Barrier NF-400 safety datasheet (SDS).

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit visqueen.com or contact our sales office at +44 (0) 333 202 6800 or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapor Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to



Visqueen Gas Barrier NF-400

damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

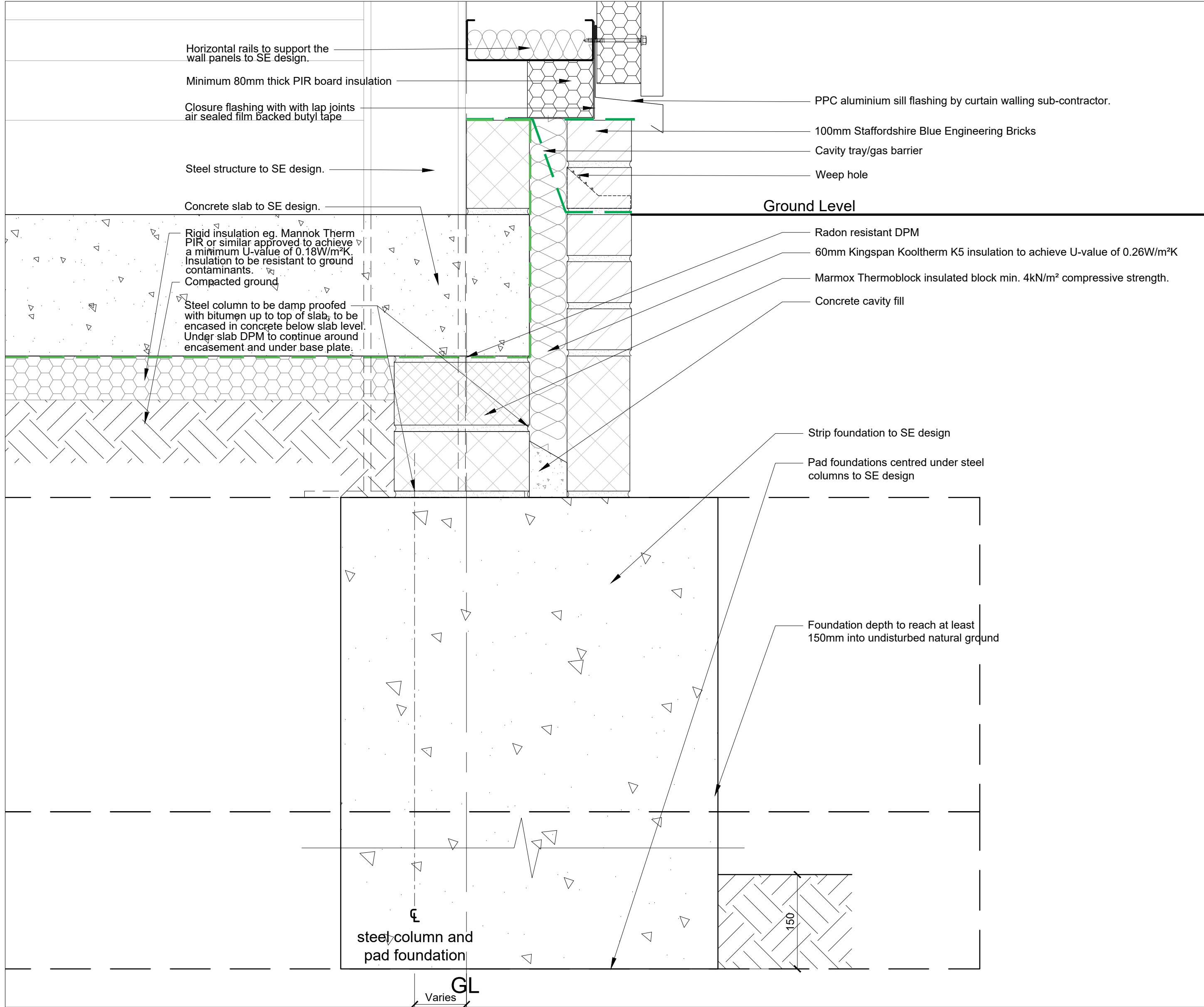
Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.

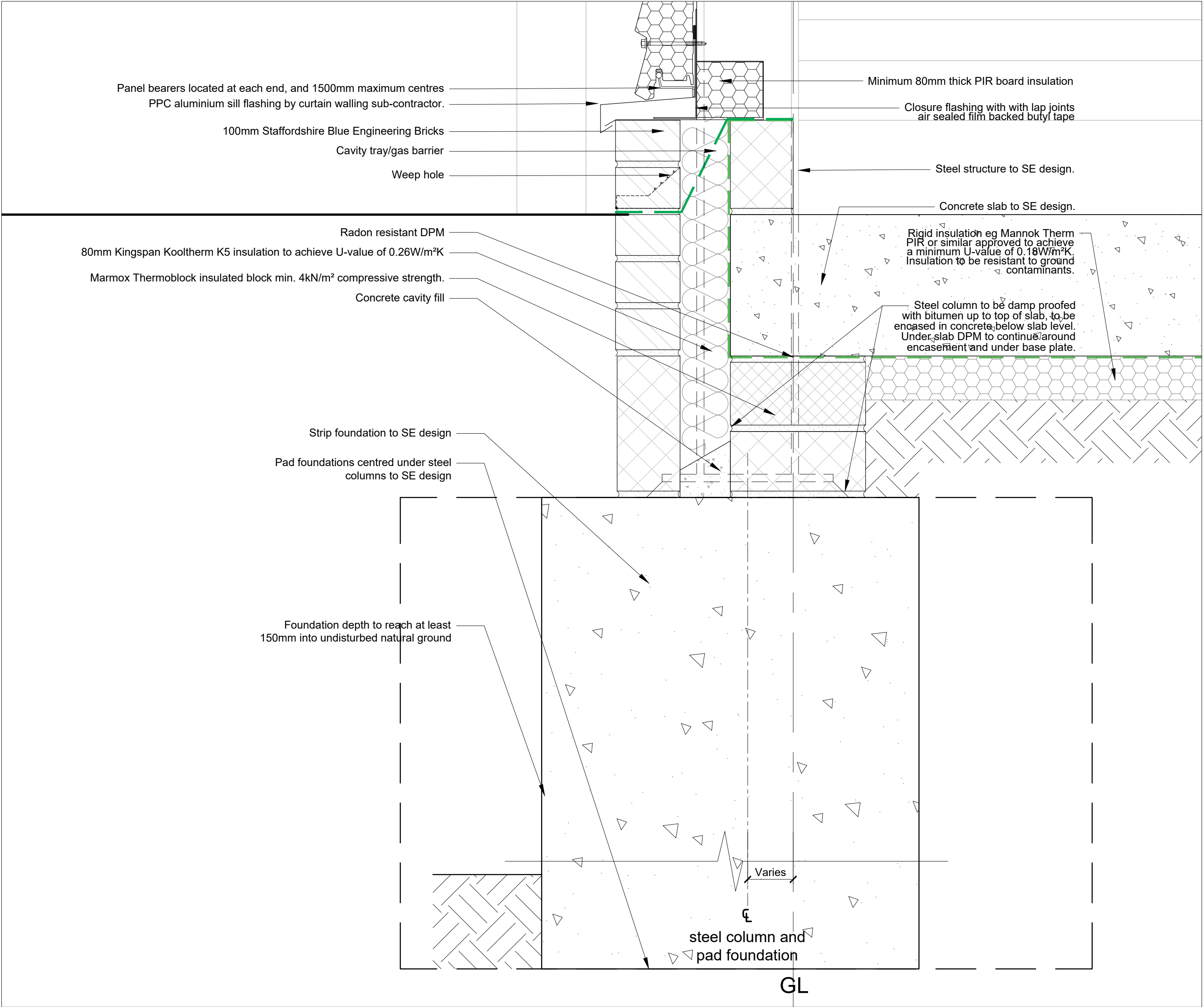
Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

APPENDIX B:
PWP Architects
DWG 6000E Details Sheet



1. Vertical cladding plinth detail Units 1-8 (**Plinth Type B**)



2. Horizontal cladding plinth detail.
Front of all Units 1-8 and Unit 7 North elevation (**Plinth Type A**)

notes:

revisions: A | 14.01.2025 | AG | Detail 1 amended to SE slab edge detail.
B | 06.02.2025 | AG | Detail 2 added.
C | 13.02.2025 | AG | Detail titles amended for clarity.
D | 29.04.2025 | AG | Foundations updated to match SE design.
E | 19.08.2025 | PT | Issued for tender

revisions:

Trustees of The Alitex DBSSASS
Seagull Lane
Emsworth, Hampshire, PO10 7QH
drawing information title **Details Sheet 1 - Slab**

pwparchitects

PWP Architects Ltd 61 South Street, Havant, Hampshire PO9 1BZ
t: 02392 482494 f: 02392 481152

e: design@pwp-architects.com
w: www.pwp-architects.com

status :
date :
scale :
drawn :
checked :

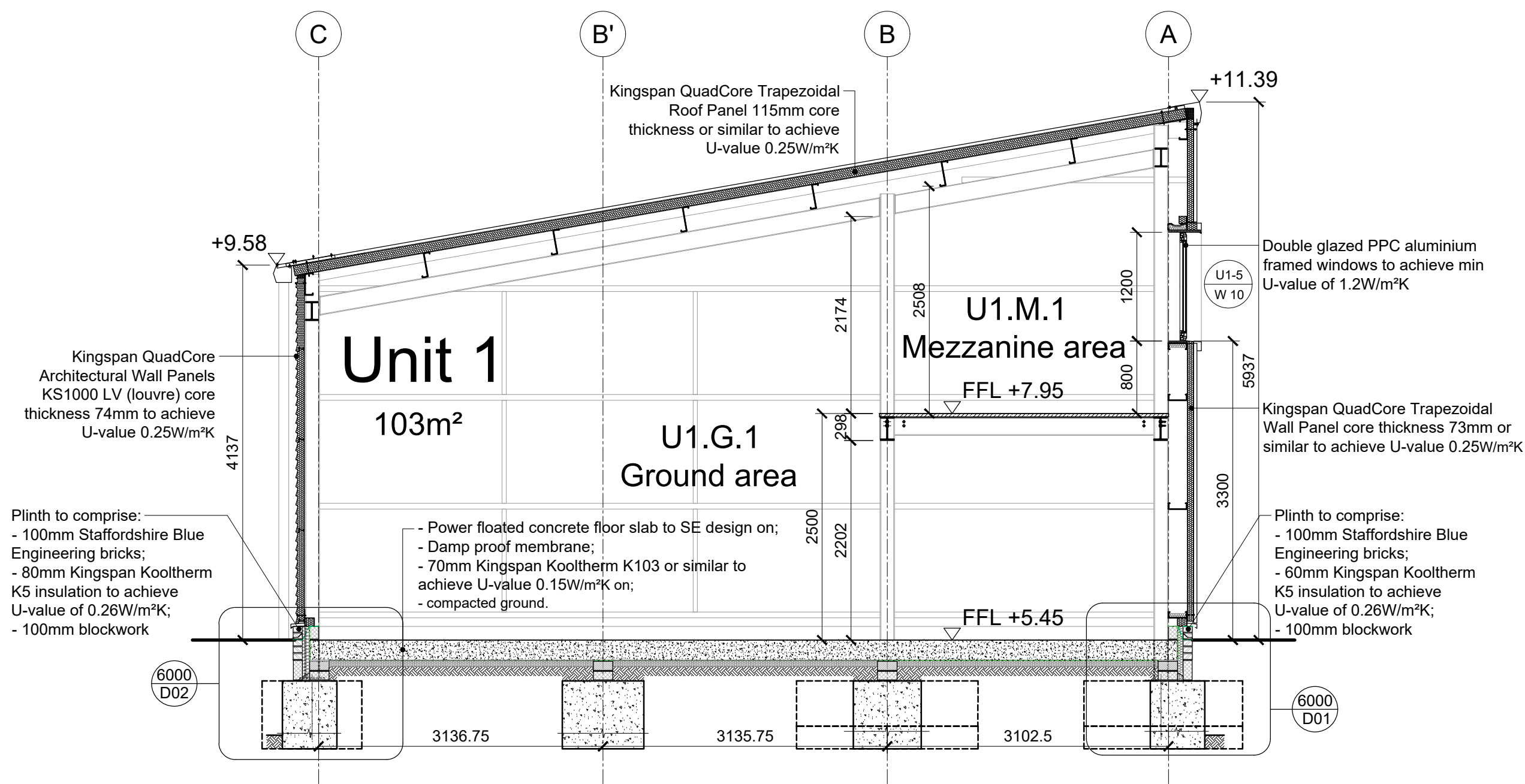
Tender
December 24
1:5 @ A1, 1:10 @ A3
AG
IV

job: **5807** dwg: **6000** rev: **E**

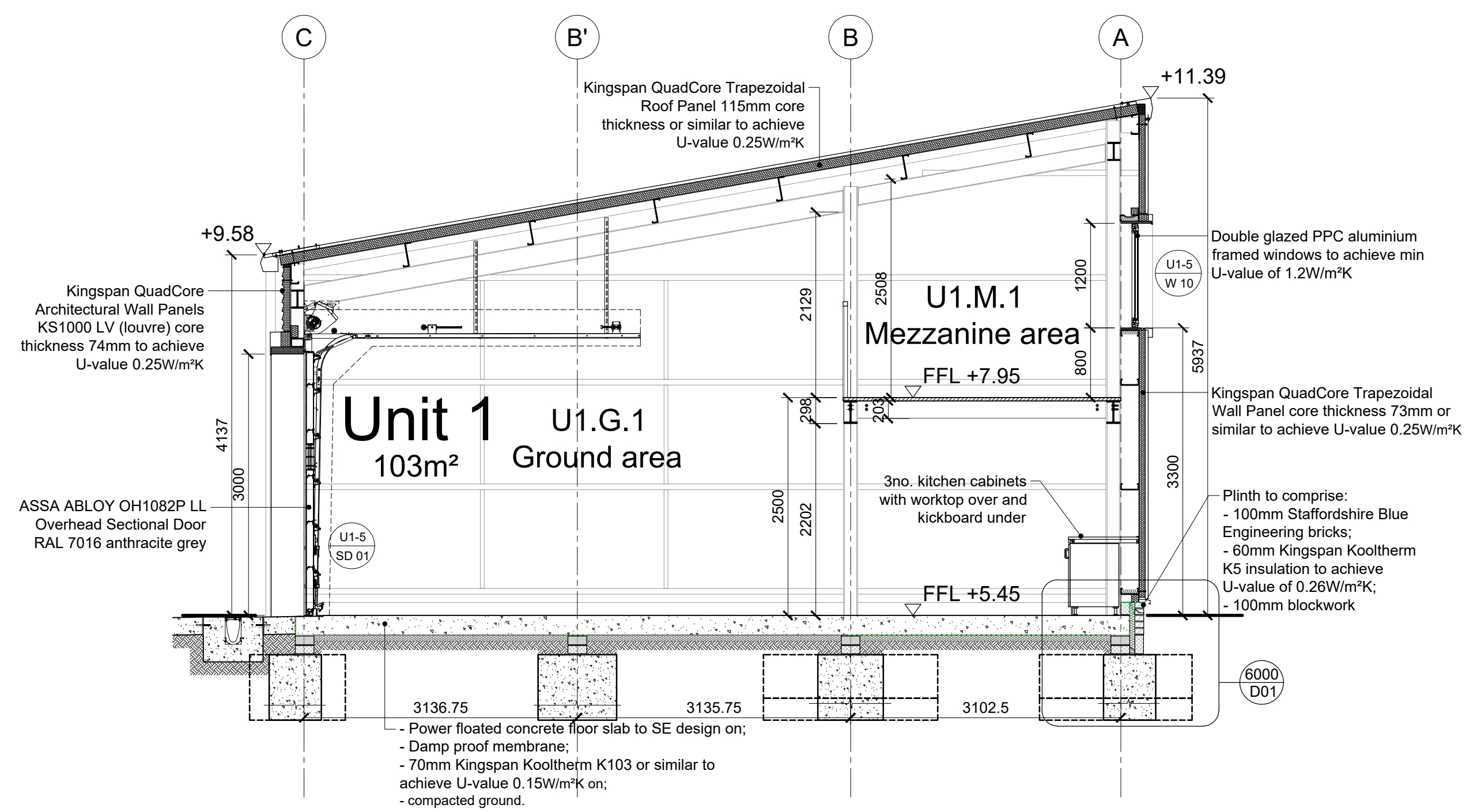
100mm @A1 / 50mm @A3

NOTE: The contractor is responsible for checking all site dimensions and levels. These should be checked prior to the ordering of any components and before the commencement of the works. All discrepancies should be brought to the attention of the Contract Administrator.

APPENDIX C:
PWP Architects
Section DWG
4300E, 4302D & 4303D



SECTION AA



SECTION BB

notes:

revisions: A | 30.01.2025 | PT | Issued to building control
B | 06.02.2025 | AG | Front of units plinth and cladding amended to SE detail.
C | 13.02.2025 | AG | General amendments.
D | 29.04.2025 | AG | Foundations updated to match SE design.
E | 19.08.2025 | PT | Issued for tender

revisions:

Trustees of The Alitex DBSSASS
Seagull Lane
Emsworth, Hampshire, PO10 7QH

drawing information title : **Proposed Sections**
Units 1-5, Sections AA, BB

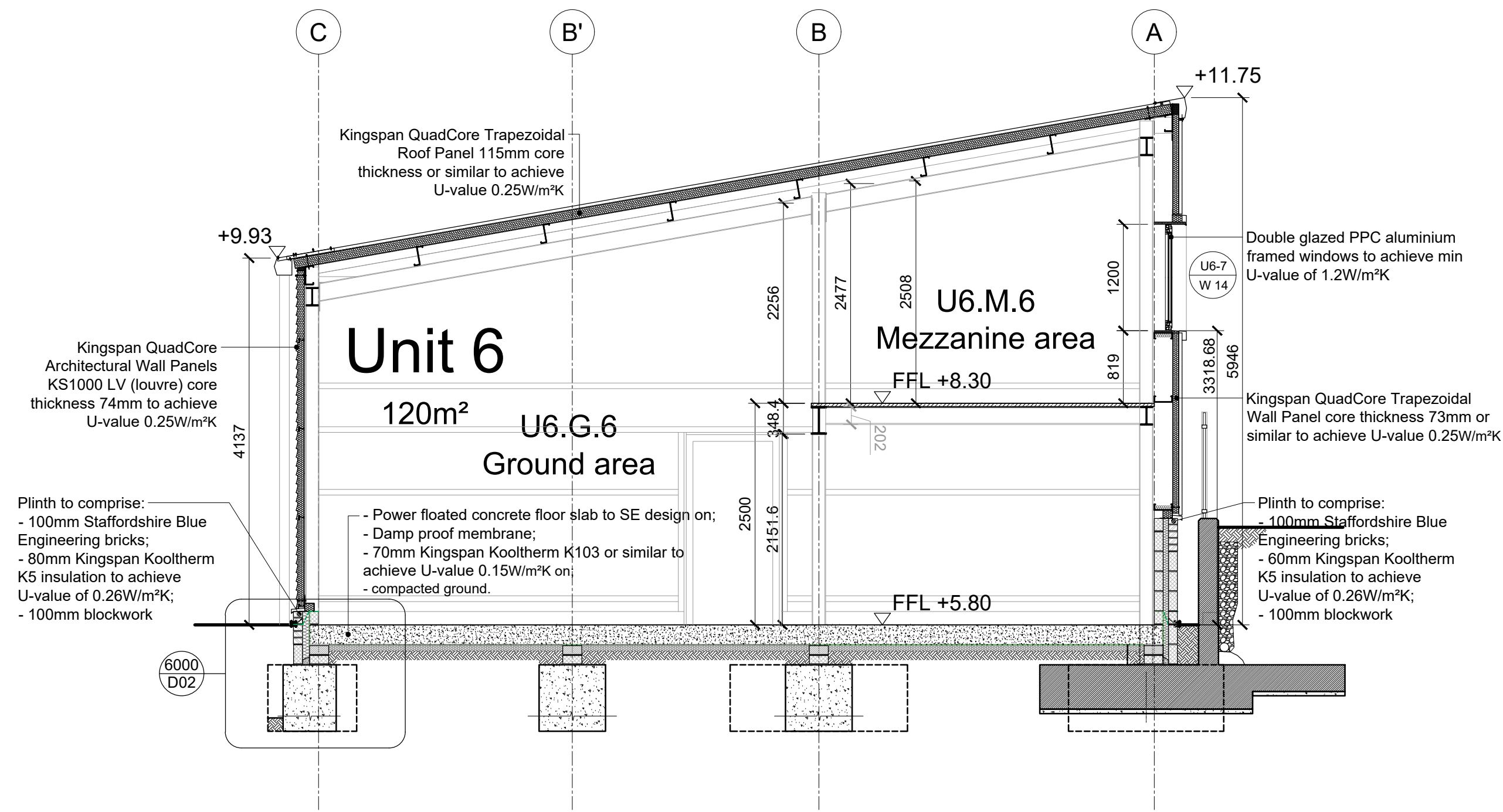
status : Tender
date : January 25
scale : 1:50 @ A1
drawn : AG
checked : IV

PWP Architects Ltd 61 South Street, Havant, Hampshire PO9 1BZ
t: 02392 482494 f: 02392 481152
e: design@pwp-architects.com
w: www.pwp-architects.com

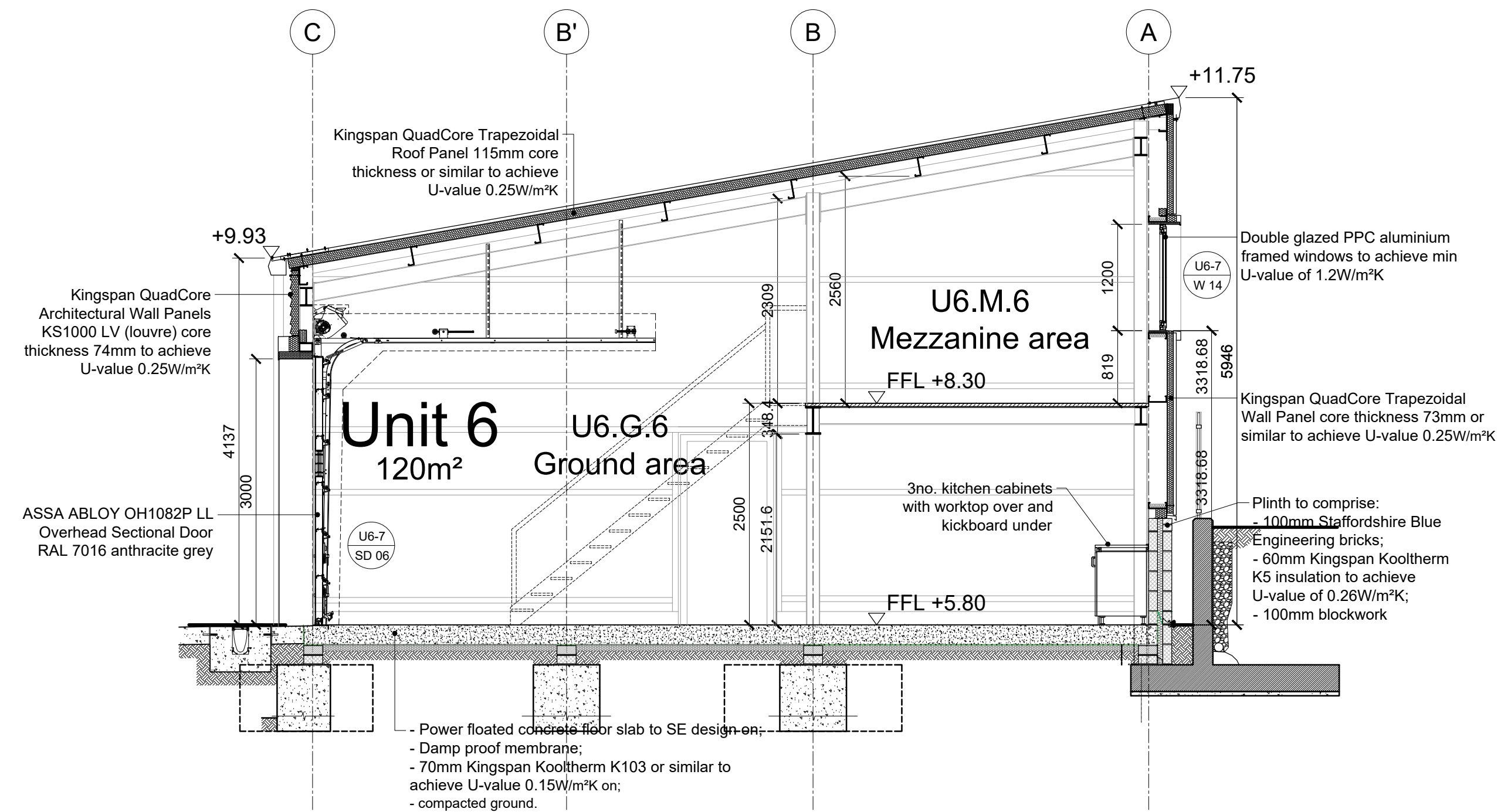
job: 5807 dwg: 4300 rev: E

100mm @A1 / 50mm @A3

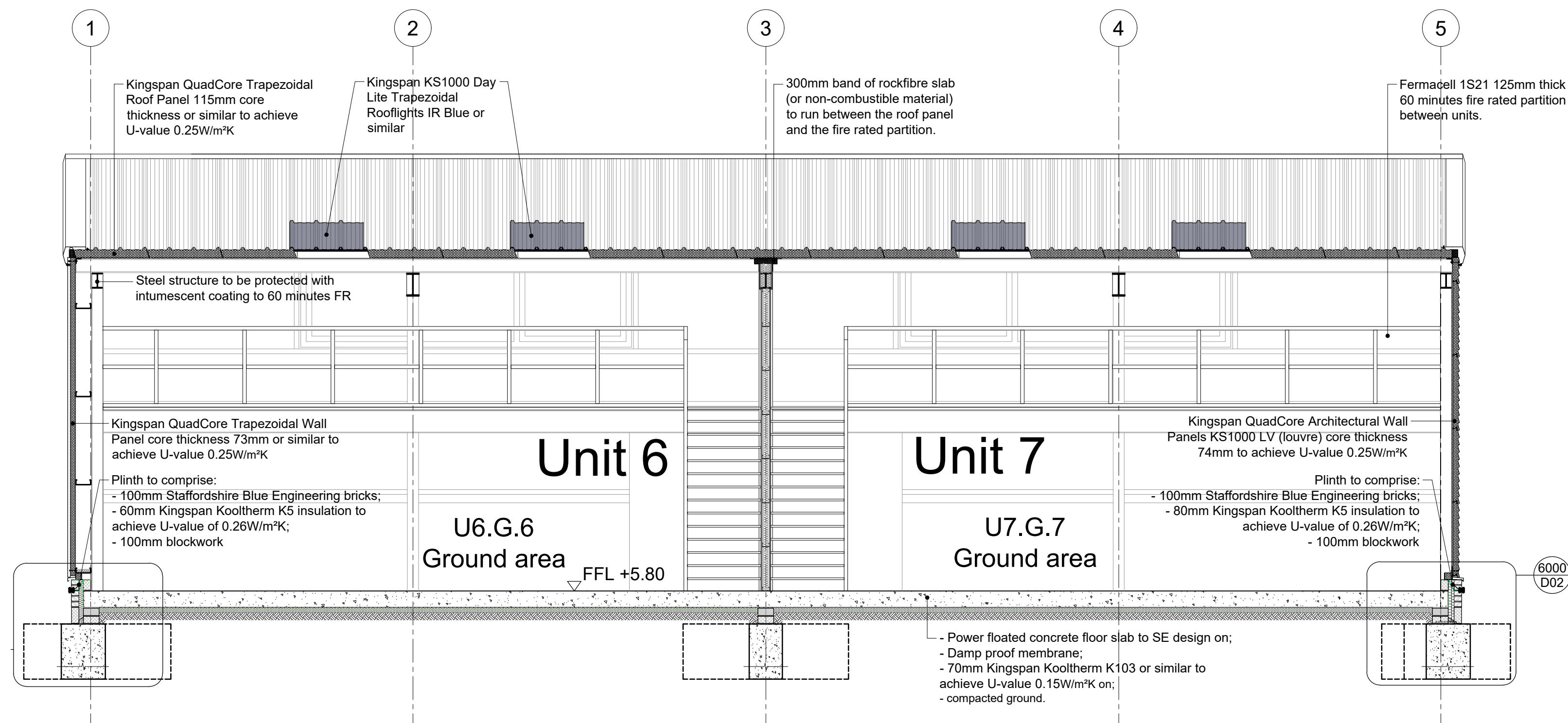
NOTE: The contractor is responsible for checking all site dimensions and levels. These should be checked prior to the ordering of any components and before the commencement of the works. All discrepancies should be brought to the attention of the Contract Administrator.



SECTION AA



SECTION BB



SECTION CC

notes:

revisions: A | 30.01.2025 | PT | Issued to building control
B | 13.02.2025 | AG | Front of units and north elevation plinth and cladding amended.
C | 29.04.2025 | AG | Foundations updated to match SE design.
D | 19.08.2025 | PT | Issued for tender

revisions:

Trustees of The Alitex DBSSASS
Seagull Lane
Emsworth, Hampshire, PO10 7QH

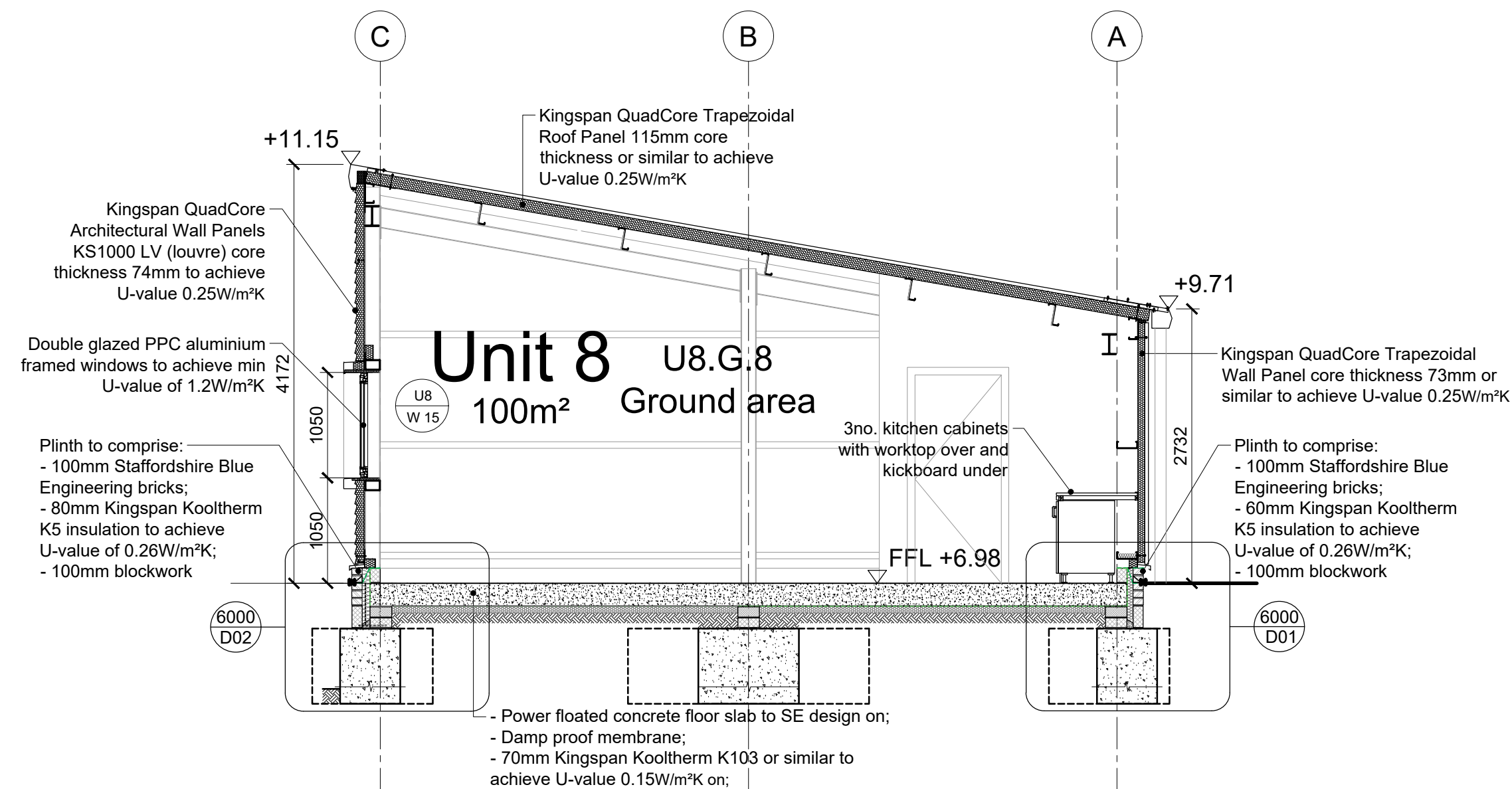
drawing information title : **Proposed Sections Units 6-7**

status :
date :
scale :
drawn :
checked :

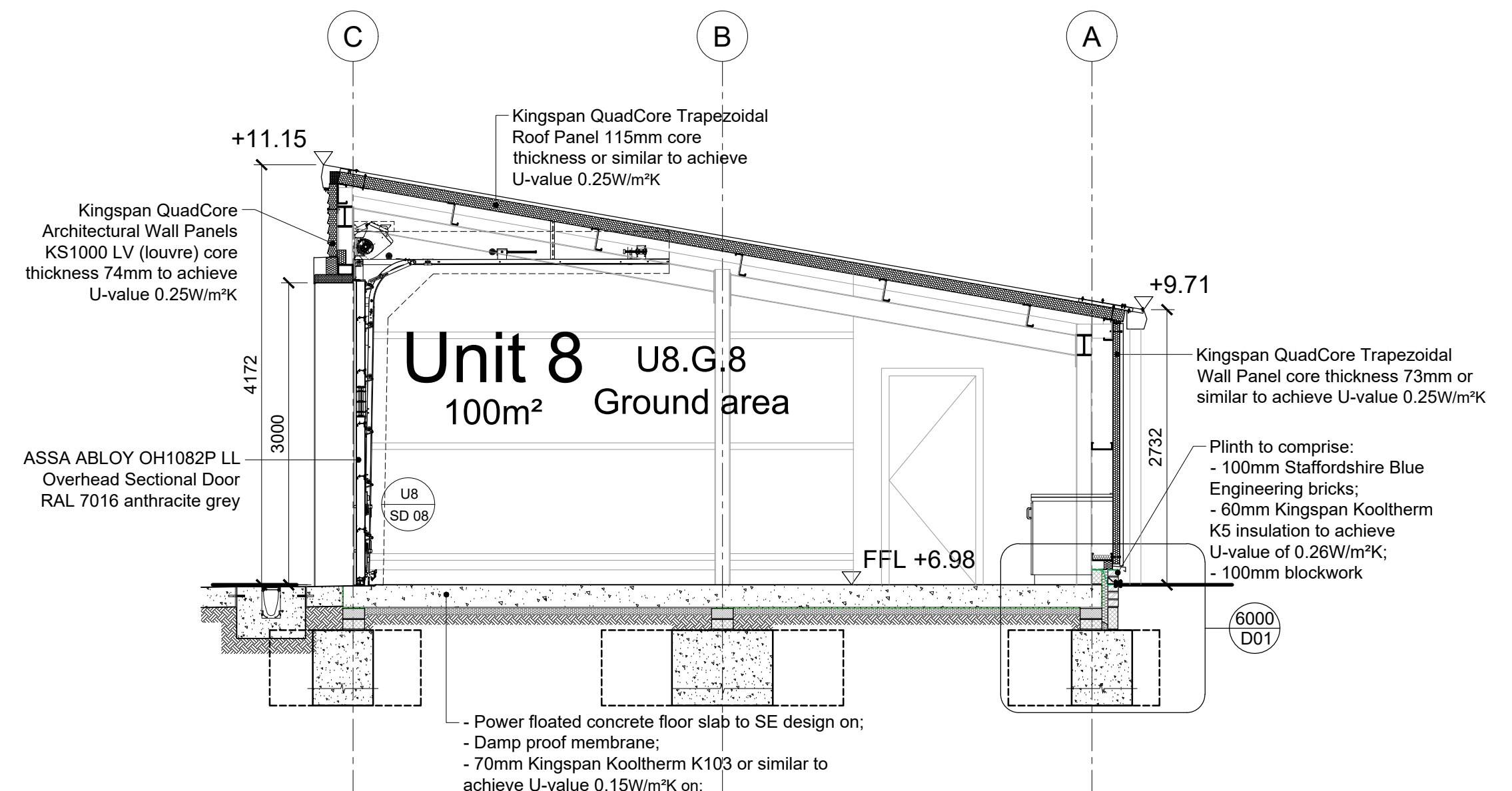
Information
January 25
1:50 @ A1
AG
IV
job: 5807
dwg: 4302
rev: D

pwparchitects
PWP Architects Ltd 61 South Street, Havant, Hampshire PO9 1BZ
t: 02392 482494 f: 02392 481152
e: design@pwp-architects.com
w: www.pwp-architects.com

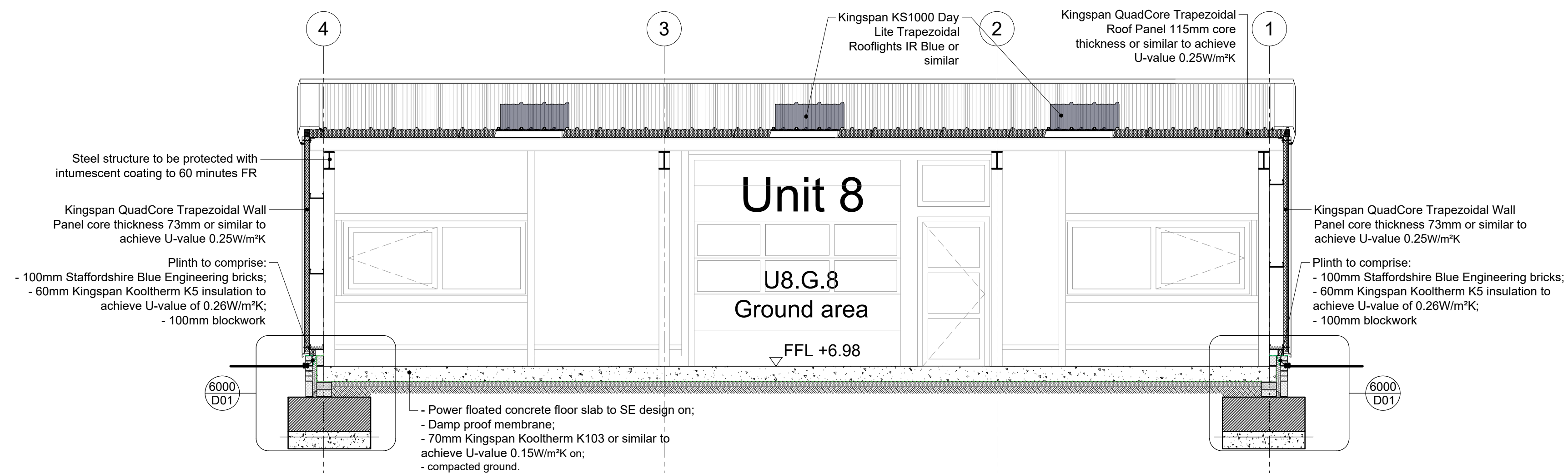
NOTE: The contractor is responsible for checking all site dimensions and levels. These should be checked prior to the ordering of any components and before the commencement of the works. All discrepancies should be brought to the attention of the Contract Administrator.



SECTION AA



SECTION BB



SECTION CC

notes:

revisions: A | 30.01.2025 | PT | Issued to building control
B | 13.02.2025 | AG | Front of unit plinth and cladding amended to SE detail.
C | 29.04.2025 | AG | Foundations updated to match SE design.
D | 19.08.2025 | PT | Issued for tender

revisions:

Trustees of The Alitex DBSSASS
Seagull Lane
Emsworth, Hampshire, PO10 7QH
drawing information title : **Proposed Sections Unit 8**

pwparchitects
PWP Architects Ltd 61 South Street, Havant, Hampshire PO9 1BZ
t: 02392 482494 f: 02392 481152
e: design@pwp-architects.com
w: www.pwp-architects.com

status :
date :
scale :
drawn :
checked :

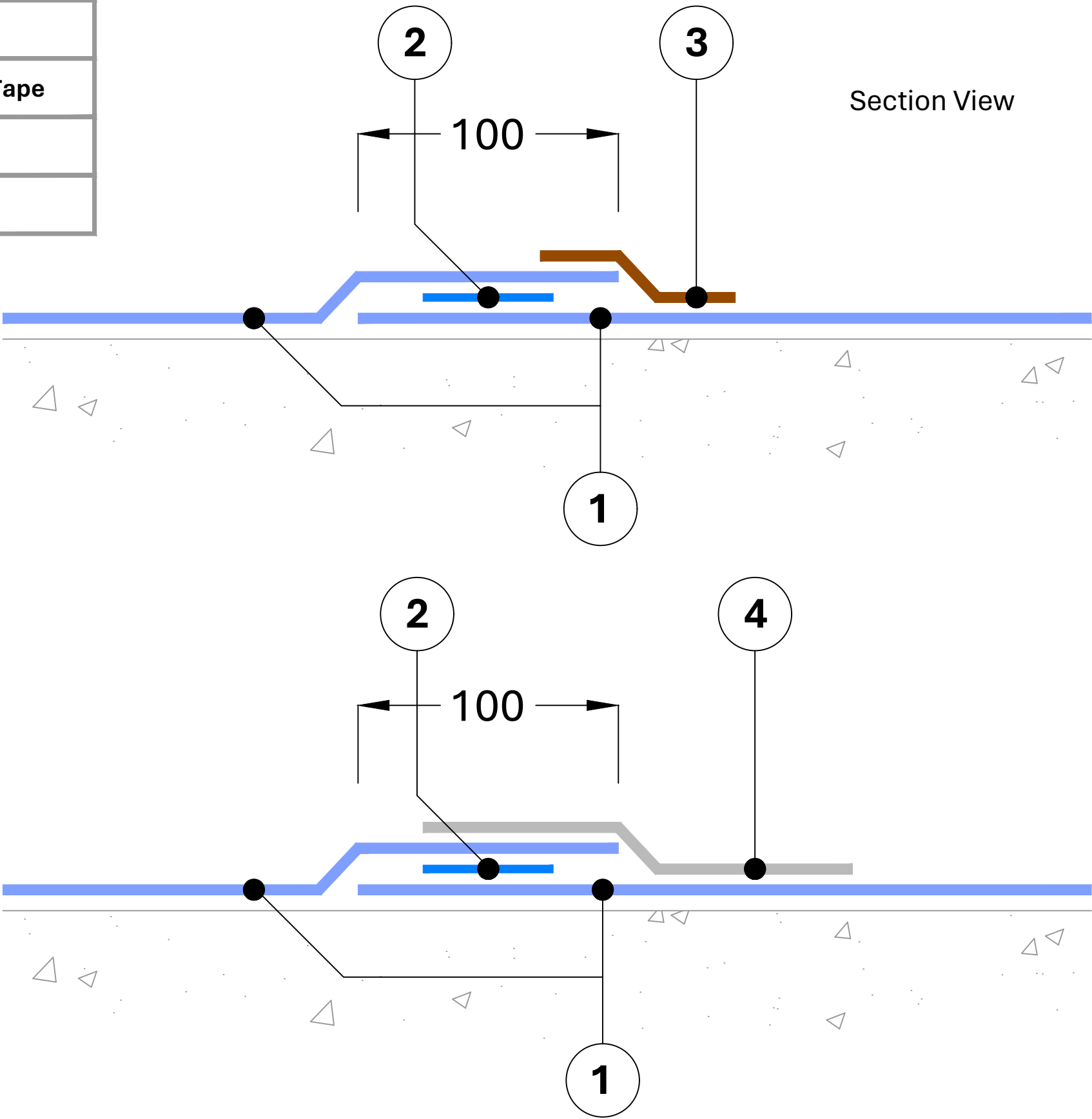
Information
January 25
1:50 @ A1
AG
IV

job: **5807** dwg: **4303** rev: **D**

NOTE: The contractor is responsible for checking all site dimensions and levels. These should be checked prior to the ordering of any components and before the commencement of the works. All discrepancies should be brought to the attention of the Contract Administrator.

APPENDIX D:
NF400-92 Taped Joint Detail
(50mm, 60mm & 150mm Tape)

Key to materials:	
1	Visqueen Gas Barrier NF-400
2	VisqueenPro Double Sided Jointing Tape
3	Visqueen NF-60 Lap Tape
4	Visqueen NF-150 Lap Tape



CRITICAL GUIDANCE NOTES

Visqueen Guidance Details are for illustration purposes only. It is the lead designer's responsibility to ensure Guidance Details are incorporated correctly into construction drawings.

Visqueen take no project design liability, or responsibility for the use of Guidance Details.

Drawing not to scale, use figured dimensions only. All figured dimensions are in millimetres.

British Standards are regularly updated. Visqueens' Guidance Details meet recommendations in place on date drawn.

Contact Visqueen Technical Services for further information.

Guidance Detail

Drawing No: NF400-92

Drawn by: JR

Approved: SD

Date drawn: August 2024

Visqueen provide a Contract Design Service where project specific drawings can be produced. Contact Visqueen Technical Services for further information.



Tel: 0333 202 6800
enquiries@visqueen.com
www.visqueen.com



TAPED JOINT DETAIL

© Copyright reserved. This drawing may not be reproduced in part or amended without prior written permission.



VisqueenPro Double Sided Jointing Tape, 50mm x 10m

Features & benefits

- Part of a Visqueen's DPM and gas protection BBA approved jointing system
- Provides resistance to harmful bulk gases ingress and moisture ingress

Product description

VisqueenPro Double Sided Jointing Tape is a blue, double sided butyl based self adhesive lap bonding tape with an oversize quick release film. It is available in roll format 50mm x 10m.

Approvals and standards

- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

VisqueenPro Double Sided Jointing Tape is used to bond membranes (gas or damp) together along the lap joints.

To complete the joint, seal with the appropriate Visqueen single sided tape.

System components

- Visqueen Top Hat Units

Storage and handling

Store in a dry and clean environment in its current packaging. The tape should not be exposed to long periods of ultraviolet light. Prior to use, ensure that the tape is stored at temperatures above 5°C.

The tape can be cut with a sharp retractable safety knife.

Care should be taken when handling the product in line with current manual handling regulations.

Preparation

Ensure all lap joint surfaces are clean, dry and free from contamination such as dust or sand. Ensure the surface and working area is not water logged. Avoid areas of unsupported jointing.

Installation

Apply VisqueenPro Double Sided Jointing Tape to the lap area of the laid sheet starting approximately 50mm from the membrane edge. Apply pressure to the tape to ensure the tape has adhered to the membrane. Remove release paper from the tape and overlap the adjoining membrane by minimum 150mm. For Visqueen damp proof membranes and gas protection membranes lap joints should then be sealed using the appropriate Visqueen lap tape. Once the tape is applied, the completed lap should be well rolled with firm pressure to ensure a completely sealed joint has occurred, and continuity with the adjacent sheet has been achieved.

Usable temperature range

It is recommended that VisqueenPro Double Sided Jointing Tape should be installed above 5°C.

Additional information

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

VisqueenPro Double Sided Jointing Tape, 50mm x 10m

VisqueenPro Double Sided Jointing Tape data table

Property	Result
Width	50mm
Length	10m
Colour	Blue
Adhesive type	Butyl
Dynamic Shear Adhesion	14 N/cm ²
Dynamic Tensile Adhesion	18 N/cm ²
180° Peel Adhesion	11 N/cm ²
Moisture Vapour Transmission Rate	0.24 g/m ² /d
Service Temperature Range	-40 to 90°C
Application temperature	>5°C

Health and safety information

Refer to VisqueenPro Double Sided Jointing Tape safety datasheet (SDS).

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit visqueen.com or contact our sales office at [+44 \(0\) 333 202 6800](tel:+44202332026800) or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapor Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

VisqueenPro Double Sided Jointing Tape, 50mm x 10m

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

Visqueen NF-60 Lap Tape, 60mm x 45m

Features & benefits

- Part of a BDA Agreement Certified jointing system - third party accreditation
- Provides an overlap seal to Visqueen gas protection membranes
- Joint integrity - reduces the risk of poured concrete entering the lap joint

Product description

Visqueen NF-60 Lap Tape is a single sided overlap tape consisting of an orange coloured polyethylene carrier film coated with a solvent acrylic adhesive, protected with a release film. The product is supplied in roll form 60mm x 45m.

To be used in conjunction with the appropriate Visqueen double sided tape.

Approvals and standards

- Third party accreditation (BDA Agreement Certificate BAB-24-339-P-A-UK)
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

When forming taped lap joints in Visqueen gas resistant membranes, joints should be bonded with the appropriate Visqueen double sided tape and then sealed with the appropriate Visqueen single sided tape.

Visqueen NF-60 Lap Tape is a single sided tape specifically designed for sealing lap joints in the following Visqueen gas resistant membranes:

- Visqueen Gas Barrier NF-400

Storage and handling

Store in warm, dry and clean environment in its current packaging. The tape should not be exposed to long periods of ultraviolet light.

Care should be taken when handling the product in line with current manual handling regulations.

For ease of installation, during hot weather conditions (>25°C), it is recommended to store the tape in a cool location prior to use.

Preparation

The gas resistant membrane joint surfaces should be clean, dry and free from contamination such as dust or sand. Ensure the surface is not water logged. Avoid areas of unsupported jointing.

The tape can be cut with a sharp retractable safety knife.

Hand rollers are required during application. Typical hand rollers include 40mm silicone pressure roller and 6mm brass penny pressure roller.

Installation

Apply appropriate Visqueen double sided tape to the gas resistant membrane lap area and remove release paper. Overlap adjoining membrane in accordance with the installation section of the membrane datasheet.

Seal the membrane lap edge with Visqueen NF-60 Lap Tape applied equidistant over the lap edge. Apply pressure to the jointed area using a roller to ensure a full bond is achieved.

Usable temperature range

It is recommended that the tape should not be installed below 5°C.

For ease of installation, during hot weather conditions (>25°C), it is recommended to store the tape in a cool location prior to use.

Additional information

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis.

The information contained in the latest datasheet supersedes all previously published editions.

Visqueen NF-60 Lap Tape, 60mm x 45m

Property	Value
Widths	60mm
Length	45m
Application temperature range	5°C to 40°C

Health and safety information

Please refer to Visqueen NF-60 Lap Tape safety datasheet (SDS).

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit [visqueen.com](https://www.visqueen.com) or contact our sales office at +44 (0) 333 202 6800 or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapor Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.



Visqueen NF-60 Lap Tape, 60mm x 45m

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

Visqueen NF-150 Lap Tape, 150mm x 10m

Features & benefits

- BDA Agreement Certified jointing system - third party accreditation
- Provides an overlap seal to Visqueen gas protection membranes
- Joint integrity - reduces the risk of poured concrete entering the lap joint

Product description

Visqueen NF-150 Lap Tape is a single sided overlap tape consisting of a white coloured polymer carrier film coated with a grey coloured cold weather butyl adhesive protected with a release film.

The product is supplied in roll form 150mm x 10m.

To be used in conjunction with the appropriate Visqueen double sided tape.

Approvals and standards

- Third party accreditation (BDA Agreement Certificate BAB-24-340-P-A-UK)
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

When forming taped lap joints in Visqueen gas resistant membranes, joints should be bonded with the appropriate Visqueen double sided tape and then sealed with the appropriate Visqueen single sided tape.

Visqueen NF-150 Lap Tape is a single sided tape specifically designed for sealing lap joints in the following

Visqueen gas resistant membranes:

- Visqueen Gas Barrier NF-400
- Visqueen Ultimate Gas Barrier NF-500
- Visqueen Ultimate Gas Barrier NF-600

Storage and handling

Store in dry and clean environment in its current packaging. The tape should not be exposed to long periods of ultraviolet light.

Care should be taken when handling the product in line with current manual handling regulations.

For ease of installation, during hot weather conditions (>25°C), it is recommended to store the tape in a cool location prior to use.

Preparation

The gas resistant membrane joint surfaces should be clean, dry and free from contamination such as dust or sand. Ensure the surface is not water logged. Avoid areas of unsupported jointing.

The tape can be cut with a sharp retractable safety knife.

Hand rollers are required during application. Typical hand rollers include 40mm silicone pressure roller and 6mm brass penny pressure roller.

Installation

Apply appropriate Visqueen double sided tape to the gas resistant membrane lap area and remove release paper. Overlap adjoining membrane in accordance with the installation section of the membrane datasheet. Seal the membrane lap edge with Visqueen NF-150 Lap Tape applied equidistant over the lap edge.

Apply pressure to the jointed area using a roller to ensure a full bond is achieved.

Usable temperature range

It is recommended that the tape should be installed above -5°C. Prior to installation, ensure that frost or ice is not present on the substrate.

Additional information

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis.

The information contained in the latest datasheet supersedes all previously published editions.

Visqueen NF-150 Lap Tape, 150mm x 10m

Property	Value
Dimensions	150mm x 10m
Adhesive type	Cold weather butyl
Application temperature range	-5°C to 40°C

Health and safety information

Please refer to Visqueen NF-150 Lap Tape safety datasheet (SDS).

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit [visqueen.com](https://www.visqueen.com) or contact our sales office at [+44 \(0\) 333 202 6800](tel:+44202332026800) or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapor Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.



Visqueen NF-150 Lap Tape, 150mm x 10m

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

APPENDIX E:

Visqueen Preformed Units

Visqueen Preformed Units

Features & benefits

- Visqueen Preformed Units - part of the Visqueen Zedex and Visqueen Ultimate Gas DPC systems
- Off-site factory manufactured - reduces the risk of water ingress
- Three dimensional shapes - simplifies detailing at complicated junctions
- Flexible materials - provides an allowance for site tolerances
- Extensive range - used for both built-in and surface fixed cavity tray applications
- Used for both damp and gas proofing applications
- Compatible with all Visqueen damp and gas proof courses and membranes

Product description

Visqueen Preformed Units (PFUs) are factory manufactured three dimensional shapes. The units are formed from either Visqueen Zedex CPT High Performance DPC (Zedex Units) or Visqueen Ultimate Gas DPC (Ultimate Units).

Approvals and standards

- Visqueen Zedex CPT High Performance DPC awarded BBA Agreement Certificate No. 94/3059
- Visqueen Zedex CPT High Performance DPC UKCA UKNI CE to EN 14909:2012 Type A
- Zedex Units conforms to the specification requirements of NHBC Amber 1 applications
- Zedex Units conforms to the specification requirements of BR 211:2015
- Visqueen Ultimate Gas DPC UKCA UKNI CE to EN 14909:2012 Type A
- Ultimate Units conforms to the specification requirements of NHBC Amber 2 applications
- Ultimate Units comply with testing regime of CIRIA C748:2014
- Ultimate Units comply with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

Visqueen Preformed Units are designed for detailing complicated cavity tray junctions in masonry cavity wall constructions including walls with a light gauge steel frame, structural timber frame or masonry inner leaf.

The units can also be used for complex junctions associated with membrane applications within floor constructions, e.g. door thresholds and corners etc. The units can also be used to prevent harmful ground gases from entering into the building at the above junctions.

Visqueen Preformed Units should be approved by all stakeholders prior to use.

System components

- Visqueen Zedex DPC Surface Fixing System
- Visqueen DPC Joint Support

Storage and handling

Visqueen Preformed Units should be stored under cover in their original packaging.

Care should be taken when handling the product in line with current manual handling regulations.

Preparation

Where necessary Visqueen Preformed Units should be cut with a sharp retractable safety knife or robust scissors.

Installation

When used for sealing complicated junctions in cavity tray applications, Visqueen Preformed Units should be installed prior to the main run of the cavity tray material, and the lap joints bonded with Visqueen 100mm Double Sided Butyl Tape.

Where the preformed unit is required to be surface fixed to the inner leaf of a cavity wall construction the vertical portion of the unit should be bonded to the inner leaf with Visqueen 100mm Double Sided Butyl Tape, the substrate having been previously primed with Visqueen High Performance Tanking Primer and allowed to dry. Visqueen Zedex DPC Fixing Strip should be used to secure the upper edge of the unit using appropriate Visqueen Fixing Pins (or alternative approved) to provide a permanent mechanical fix.

To ensure long term integrity of the cavity tray lap, all preformed unit to DPC cavity tray laps formed on site should be fully supported and the support should remain in position. Unless formed over a permanent rigid supporting substrate, all laps should be formed with a Visqueen DPC Joint Support positioned directly beneath the lap.

When used for sealing complex junctions in floor membrane applications, Visqueen Preformed Units should be

Visqueen Preformed Units

bonded and sealed with the same taping system as used for the membrane lap joints.

Usable temperature range

It is recommended that Visqueen Preformed Units and associated system components should not be installed below 5°C.

Additional information

Visqueen Preformed Units are factory manufactured using customer specified dimensions. Please note that the units are non-returnable.

Visqueen Preformed Units have a manufacturing tolerance of ± 5 mm on dimensions.

For built in internal and external cavity tray corners see PFU-553 or PFU-501 (sloping unit), and for surface fixed internal and external corners see PFU-554 or PFU-502 (sloping unit).

For membrane corners see PFU-554 or PFU-553 and for door thresholds see PFU-206.

For information on other available Visqueen Preformed Units, contact Visqueen Technical Services +44 (0) 333 202 6800

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

Property	Test method	Units	Compliance criteria	Zedex Unit results	Ultimate Unit results
Thickness	BS EN 1849-2	mm	-1	0.8	0.5
Weight	BS EN 1849-2	g/m ²	-1	750	470
Watertightness 2kPa	BS EN 1928	-	Pass/Fail	Pass	Pass
Resistance to low temperatures	BS EN 495-5	°C	MDV	-40	-40
Flexibility at temperatures	BS EN 1109	°C	MDV	-15	-15
Foldability	BS EN 495-5	°C	MDV	-40	-40
Durability (artificial ageing)	BS EN 1296 and BS EN 1928	-	Pass/Fail	Pass	Pass
Durability chemical resistance	BS EN 1847	-	Pass/Fail	Pass	Pass
Durability against alkali - Annex C	BS EN 14909	-	Pass/Fail	Pass	Pass
Resistance to static loading	BS EN 12730	kg	MLV	20	20
Water vapour transmission - resistance	BS EN 1931	MNs/g	MDV	372	1034
Water vapour transmission - permeability	BS EN 1931	g/m ² /d	MDV	0.4	0.13
Radon permeability	SP Method no. 3873	m ² /s	MDV	8.30×10^{-12}	-
Carbon dioxide permeability	ISO 2782:1995	m ² /sec/Pa	MDV	1.58×10^{-16}	-
Methane permeability	ISO 15105-1	ml/m ² /d/ atm	<40	-	1.3
Benzene, toluene, ethyl benzene, m p xylene (BTEX)	ISO 15105-2	ml/m ² /d	MDV	-	<0.11
Reaction to Fire	BS EN 13501-1	Class	MDV	F	F

Visqueen Preformed Units

Health and safety information

Refer to the Visqueen Preformed Units safety datasheet (SDS).

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit [visqueen.com](https://www.visqueen.com) or contact our sales office at [+44 \(0\) 333 202 6800](tel:+44202332026800) or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapor Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

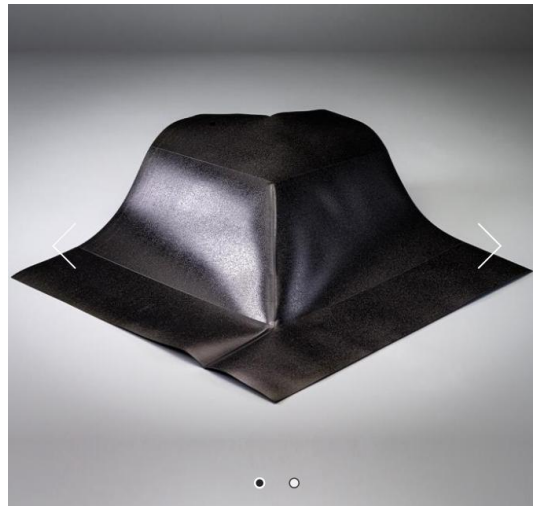
Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen Contract Design Services

Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.



<https://visqueen.com/products/visqueen-preformed-units/>

Visqueen Preformed Units

Visqueen Preformed Units (PFUs) are factory manufactured three dimensional shapes. The units are formed from either Visqueen Zedex CPT High Performance DPC (Zedex Units) or Visqueen Ultimate Gas DPC (Ultimate Units).

Features & Benefits

- Visqueen Preformed Units – part of the Visqueen Zedex and Visqueen Ultimate Gas DPC systems
- Off-site factory manufactured – reduces the risk of water ingress
- Three dimensional shapes – simplifies detailing at complicated junctions
- Flexible materials – provides an allowance for site tolerances
- Extensive range – used for both built-in and surface fixed cavity tray applications
- Used for both damp and gas proofing applications
- Compatible with all Visqueen damp and gas proof courses and membranes

APPENDIX F:
Visqueen NF-Detailing Strip
300mm

Visqueen NF-Detailing Strip, 300mm x 10m

Features & benefits

- BDA Agreement Certified detailing material - third party accreditation
- Flexible - can be cut and shaped to various applications
- Multi-use - suitable for complicated junctions, stanchions, patchwork and terminations
- Gas resistant non foil self adhesive detailing membrane

Product description

Visqueen NF-Detailing Strip is a single sided strip, consisting of a white coloured polymer carrier film coated with a grey coloured cold weather butyl adhesive compound protected with a release film. It is available in roll format, 300mm x 10m.

Approvals and standards

- BDA Agreement Certified detailing material - third party accreditation
- Complies with the methane gas transmission rate, mass per unit area and thickness requirements of BS 8485:2015 + A1:2019 -
- industry standard for methane and carbon dioxide protection
- Suitable for all Characteristic Gas Situation (CS) ground gas regimes
- Conforms to the specification requirements of NHBC Amber 1 and Amber 2 applications
- Conforms to the specification requirements of BR 211:2023
- Visqueen certified with Quality Management System ISO 9001:2015
- Visqueen certified with Occupational Health and Safety System ISO 45001:2018
- Visqueen certified with Environmental Management System ISO 14001:2015

Usage

Visqueen NF-Detailing Strip is used for sealing junctions and complicated detailing in Visqueen gas protection systems, waterproofing systems, and damp proofing systems. It can be used on concrete, blockwork, brickwork, particle boards, steel work, steel stanchions and wooden substrates for both vertical and horizontal application.

Storage and handling

Store in dry and clean environment in its current packaging. The product should not be exposed to long periods of ultraviolet light.

Care should be taken when handling the product in line with current manual handling regulations.

For ease of installation, during hot weather conditions (>25°C), it is recommended to store the product in a cool location prior to use.

Preparation

Surfaces must be smooth and free from sharp protrusions, ensure the surface and working area is not water logged and is frost free. When applying to blockwork or brickwork the joints must be flush pointed. Prior to bonding, substrates such as masonry, concrete and steel should be primed using Visqueen HP Tanking Primer and allowed to dry thoroughly. Visqueen HP Tanking Primer must not be used on Insulation or ICF systems.

Visqueen NF-Detailing Strip can be cut with a sharp retractable safety knife.

Hand rollers are required during application. Typical hand rollers include 40mm silicone pressure roller and 6mm brass penny pressure roller.

Installation

Position and peel back the Visqueen NF-Detailing Strip release film and apply the pressure sensitive, self adhesive grey face to the prepared substrate. Apply pressure by rolling to ensure a full bond is achieved.

All lap joints should be a minimum of 150mm and must be pressed and rolled to ensure damp, gas or waterproofing continuity.

When used for sealing membranes punctures, Visqueen NF-Detailing Strip should be lapped at least 150mm beyond the extents of the puncture.

Usable temperature range

It is recommended that Visqueen NF-Detailing Strip should be installed above -5°C. Prior to installation, ensure that frost or ice is not present on the substrate.

For ease of installation, during hot weather conditions (>25°C), it is recommended to store the product in a cool location prior to use.

Visqueen NF-Detailing Strip, 300mm x 10m

Additional information

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

Property	Value
Widths	300mm
Length	10m
Application temperature range	-5°C to 40°C

Health and safety information

Refer to the Visqueen-NF Detailing Strip safety datasheet (SDS)

About Visqueen

Visqueen is a leading provider of construction membrane technologies and design-based solutions for ground gas, structural waterproofing, damp proofing and fire protection.

We offer complete support at every stage of the specification, including the supply chain process. As the UK's principal technical authority, we are best placed to ensure that the principal designer and contractor specify the most technically suited, durable, and competitive solution to guarantee their project is protected for the lifetime of the building.

Visqueen is at the forefront of advanced membrane technology and innovation in the construction industry, earning the trust and loyalty of specifiers throughout the UK and Europe.

For more information, visit visqueen.com or contact our sales office at [+44 \(0\) 333 202 6800](tel:+44202332026800) or enquiries@visqueen.com

Complete Range, Complete Solution



Passive Fire Protection



Gas Protection



Damp Proof Membrane



Air and Vapour Control



Stormwater



Damp Proof Course



Temporary Protection

Visqueen Technical Support

Visqueen offer a comprehensive full nationwide technical support. Our team of CSSW qualified technical support managers provide on site design-based solutions for specifiers, contractors and builders merchants, and will ensure that from design stage to installation the project is fully risk assessed and the specification is approved by all stakeholders.

Our Technical Office, can design, prepare and manage CAD detailing, together with assisting in quantity take offs, while offering advice on technical installations and product selection.

Competency & Design

Visqueen promotes competency in building design by ensuring that its technical team possesses the necessary skills, knowledge, experience, and ethical practices. The company adopts the "golden thread of information," ensuring all project data is digitally secure and accessible throughout a building's lifecycle. This approach aligns with the Building Safety Act and aims to foster accountability and compliance with evolving regulations, providing clients with confidence in the safety and reliability of their projects.

Visqueen CPD Seminars

Visqueen's CPD Seminars offer insights into Building Regulations, Standards, and industry guidance related to damp proofing, hazardous ground gas protection, and structural waterproofing. These one-hour seminars are tailored for construction design professionals and delivered by our Technical Support Managers. Visit our website to book a free CPD.

Visqueen NF-Detailing Strip, 300mm x 10m

Visqueen Contract Design Services

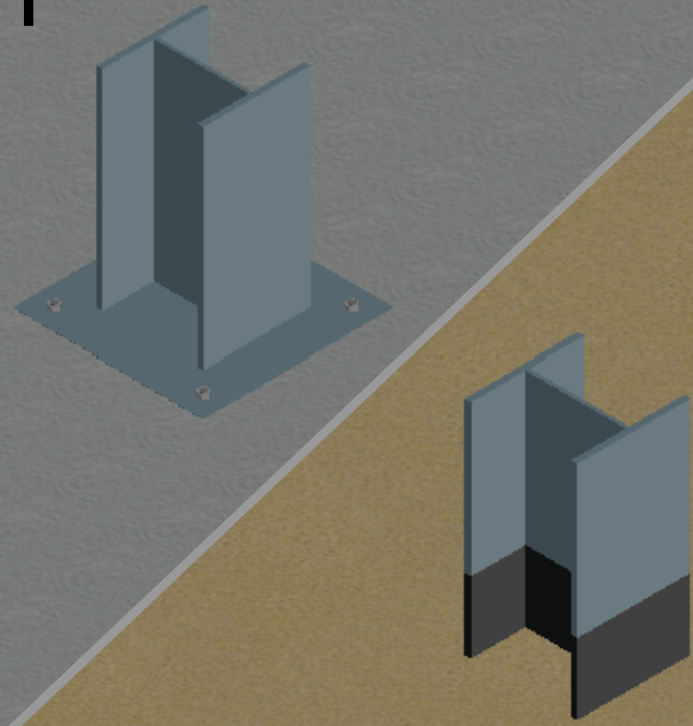
Visqueen Contract Design Services offers a bespoke design service led by our team of Certified Surveyors in Structural Waterproofing (CSSW), providing experienced and specialised waterproofing design expertise for complex projects. We provide comprehensive support throughout the entire project, ensuring that all work meets the requirements of warranty providers and adheres to the highest standards of quality, reliability and current legislation.

Visqueen Training Academy

Based at our Derbyshire facility, the Visqueen Training Academy offers a variety of training programs across the UK. These include one-day product awareness sessions for distributors and builders' merchants, and intensive two-day courses for hands-on product installation training. Contact us for more information.

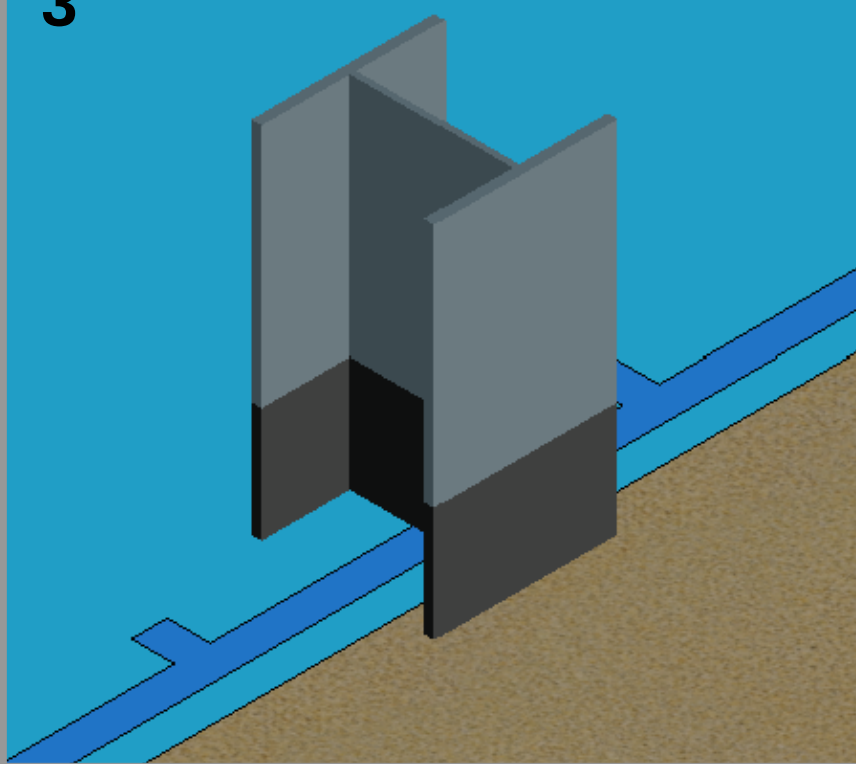
APPENDIX G:
NF400-82
Steel Column Detailing

1



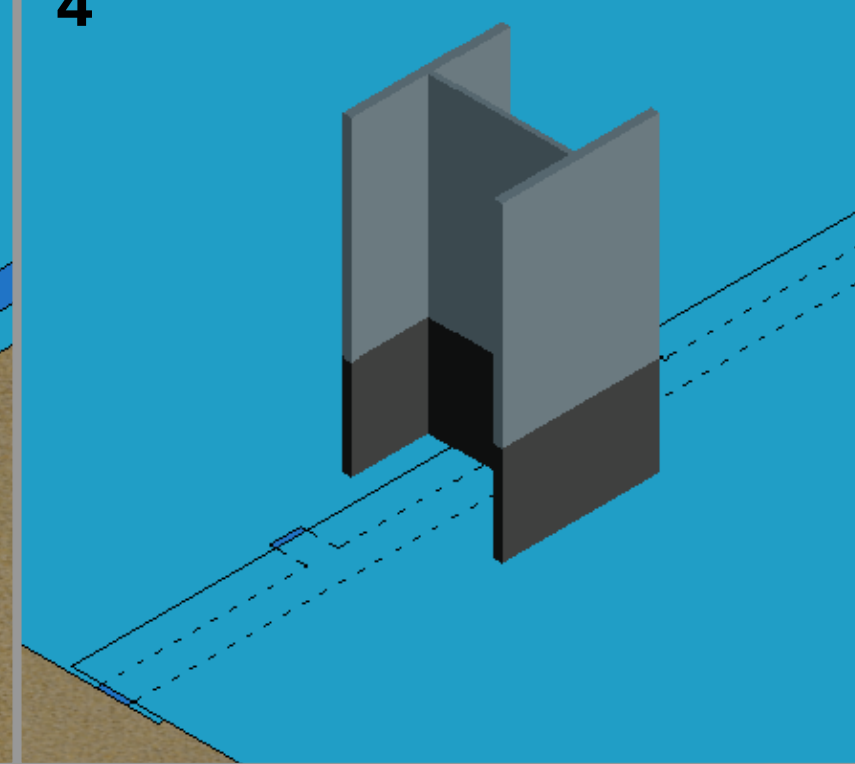
Install blinding layer. Prime steel column with Visqueen HP Tanking Primer min 150mm vertically.

3



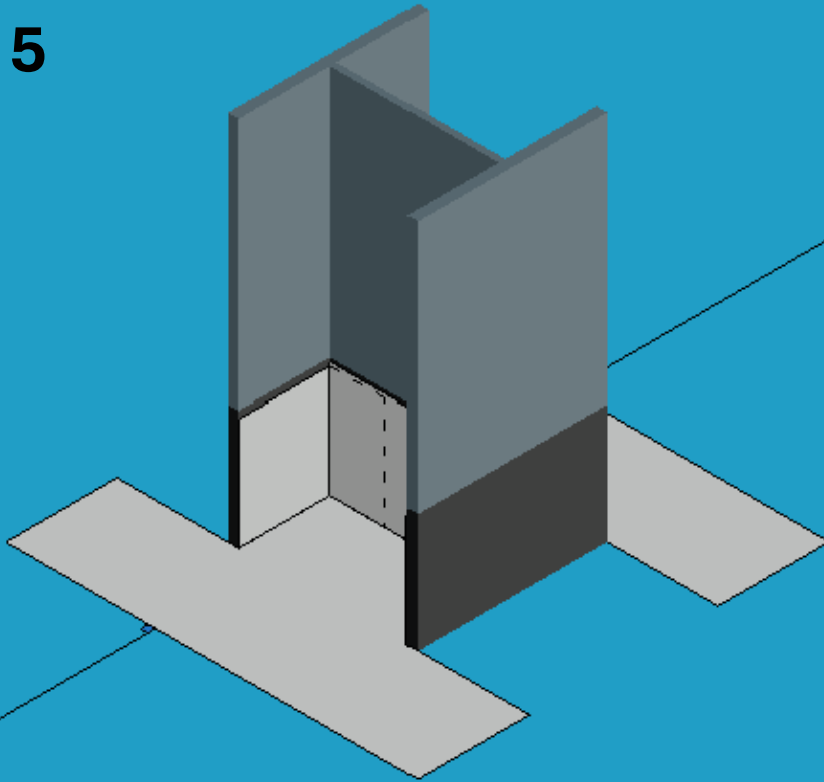
Cut and install Visqueen Gas Barrier NF-400 around column. Apply VisqueenPro Double Sided Jointing Tape.

4



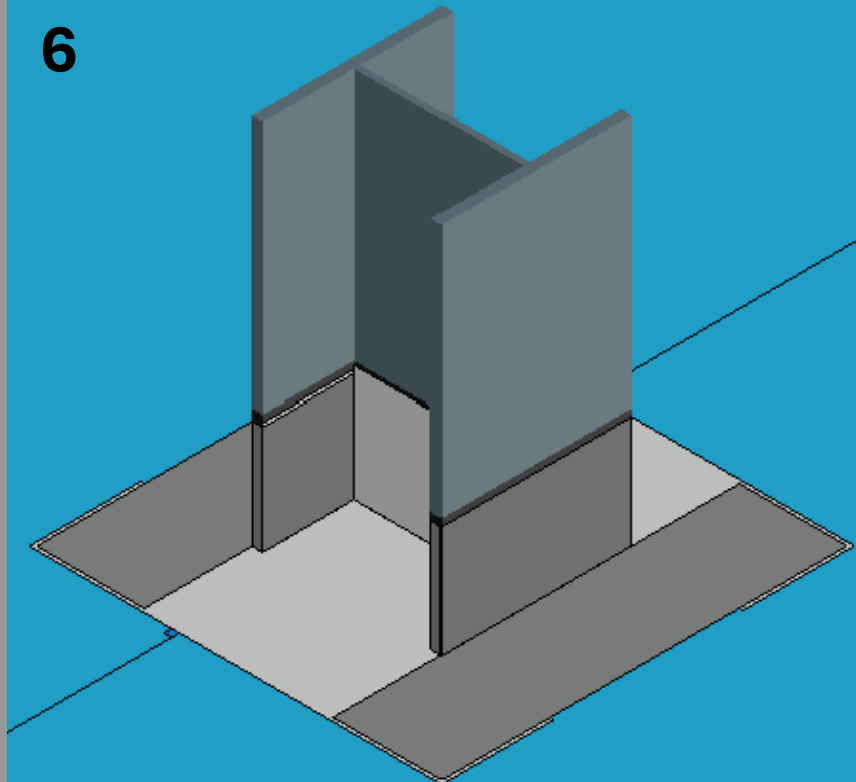
Cut and install adjacent barrier around column, bonding to double sided tape.

5



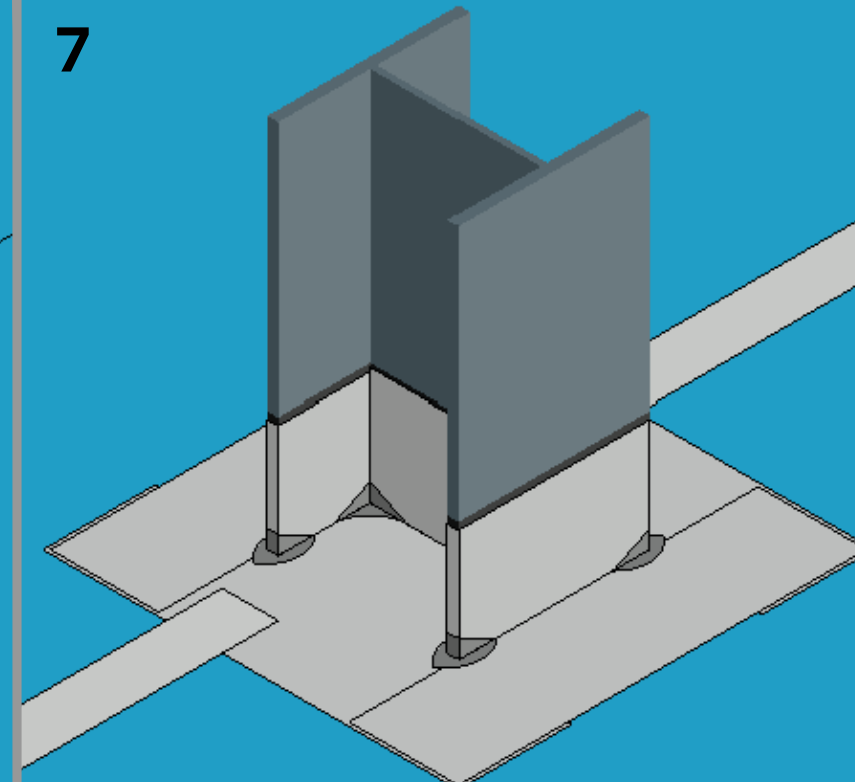
Bond Visqueen NF-Detailing Strip to column web and barrier, extending min 150mm up column and onto barrier.

6



Bond additional detailing strip to column flange and barrier, extending min 150mm up column, onto barrier and detailing strip from previous step.

7



Cut detailing strip into triangular pieces and bond to corners. Bond Visqueen NF-60 or NF-150 Lap Tape (as per specification) over barrier lap and min 75mm onto detailing strip.

CRITICAL GUIDANCE NOTES

Visqueen Guidance Details are for illustration purposes only. It is the lead designer's responsibility to ensure Guidance Details are incorporated correctly into construction drawings.

Visqueen take no project design liability, or responsibility for the use of Guidance Details.

Drawing not to scale, use figured dimensions only. All figured dimensions are in millimetres.

British Standards are regularly updated. Visqueens' Guidance Details meet recommendations in place on date drawn.

Protection such as pressure relief or ventilation measures (not shown) may be necessary to meet the requirements of British Standards and industry guidance.

Each stage of the Visqueen NF-Detailing Strip installation to be rolled to ensure a full bond is achieved.

Visqueen TreadGUARD protection layer above barrier required as per specification.

Contact Visqueen Technical Services for further information.

Guidance Detail

Drawing No: NF400-82

Drawn by: JR

Approved: SD

Date drawn: August 2024

Visqueen provide a Contract Design Service where project specific drawings can be produced. Contact Visqueen Technical Services for further information.



Tel: 0333 202 6800
enquiries@visqueen.com
www.visqueen.com

VISQUEEN

GAS

BARRIER NF-400

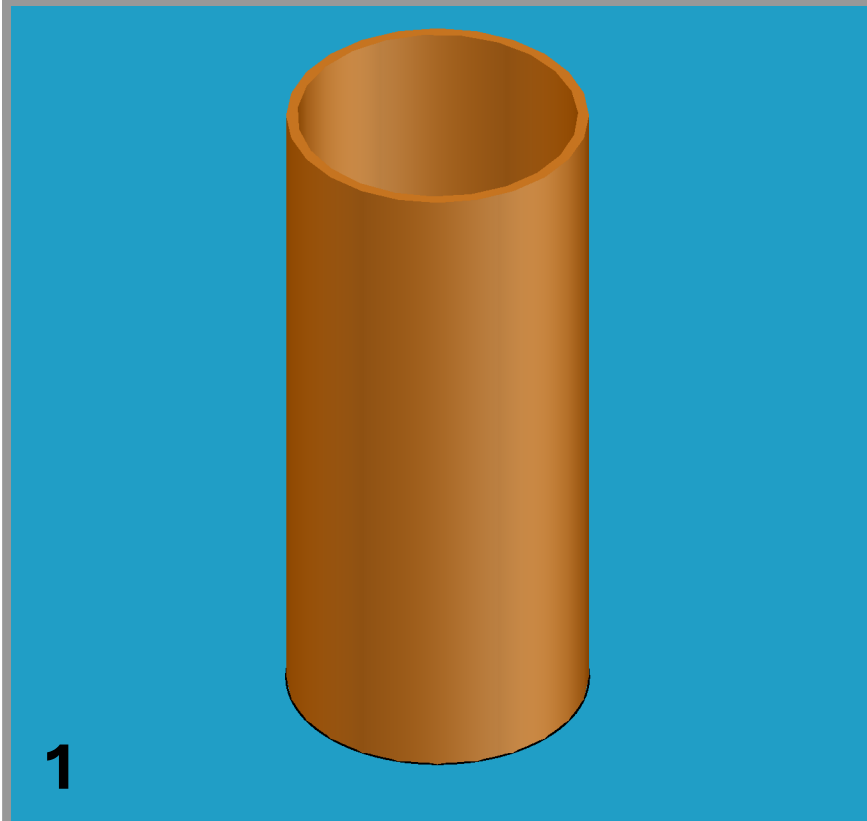
STEEL COLUMN DETAILING USING VISQUEEN NF-DETAILING STRIP STEP BY STEP

© Copyright reserved. This drawing may not be reproduced in part or amended without prior written permission.

VISQUEEN

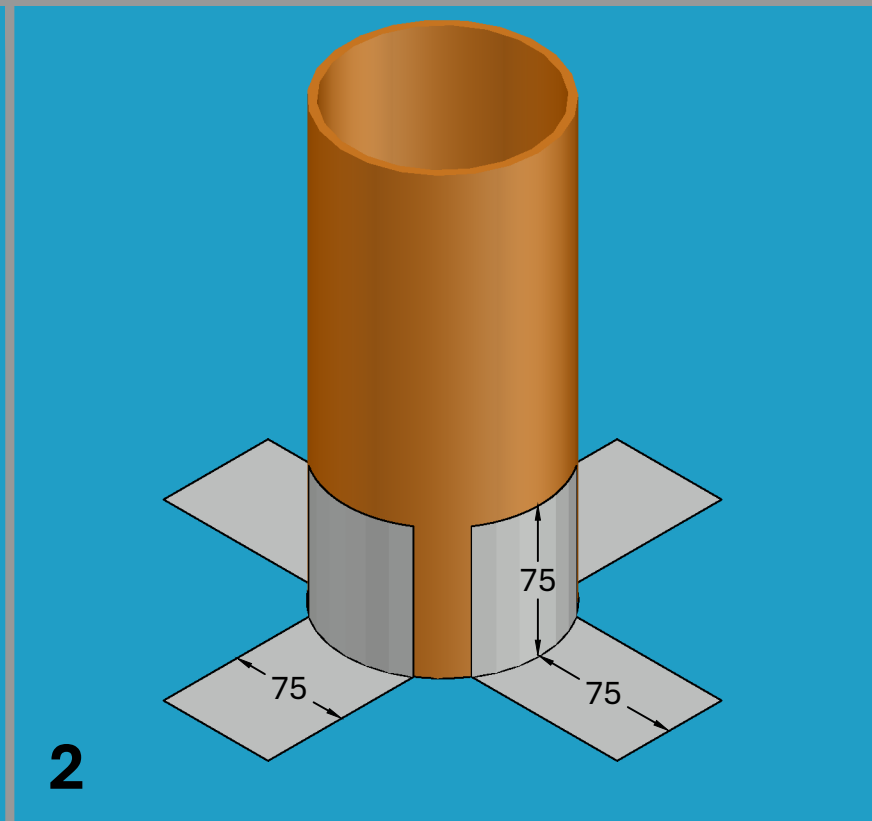
A Berry Global Brand

APPENDIX H:
NF400-81
Service Pipe Detailing



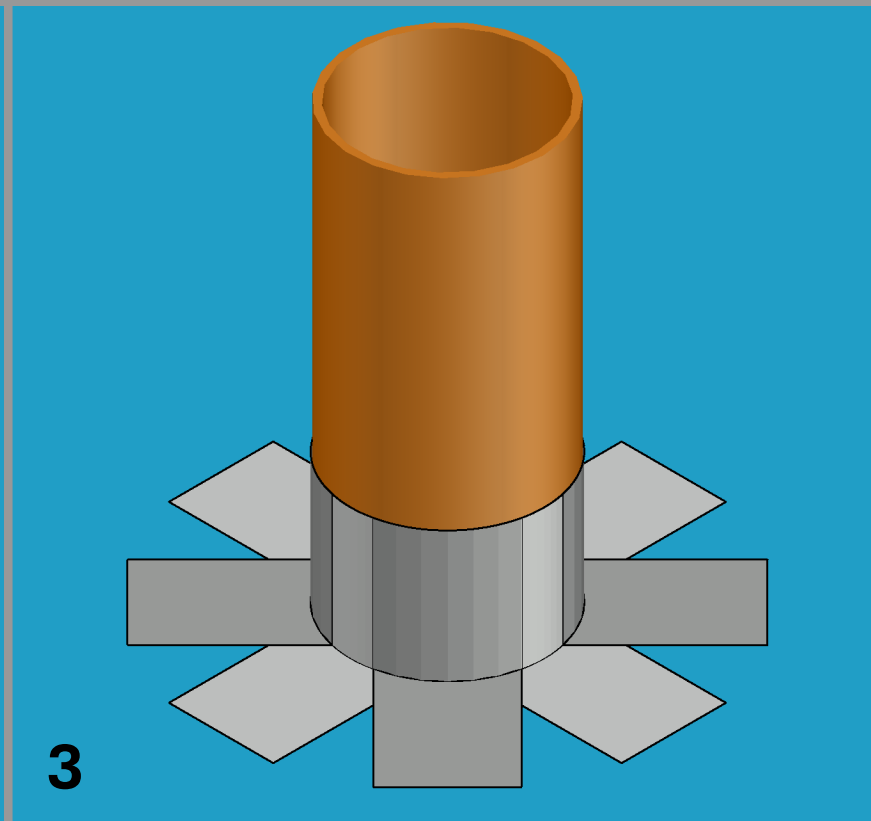
1

Ensure surface of pipe is clean and free from any contamination. Cut Visqueen Gas Barrier NF-400 to fit tight around base of pipe.



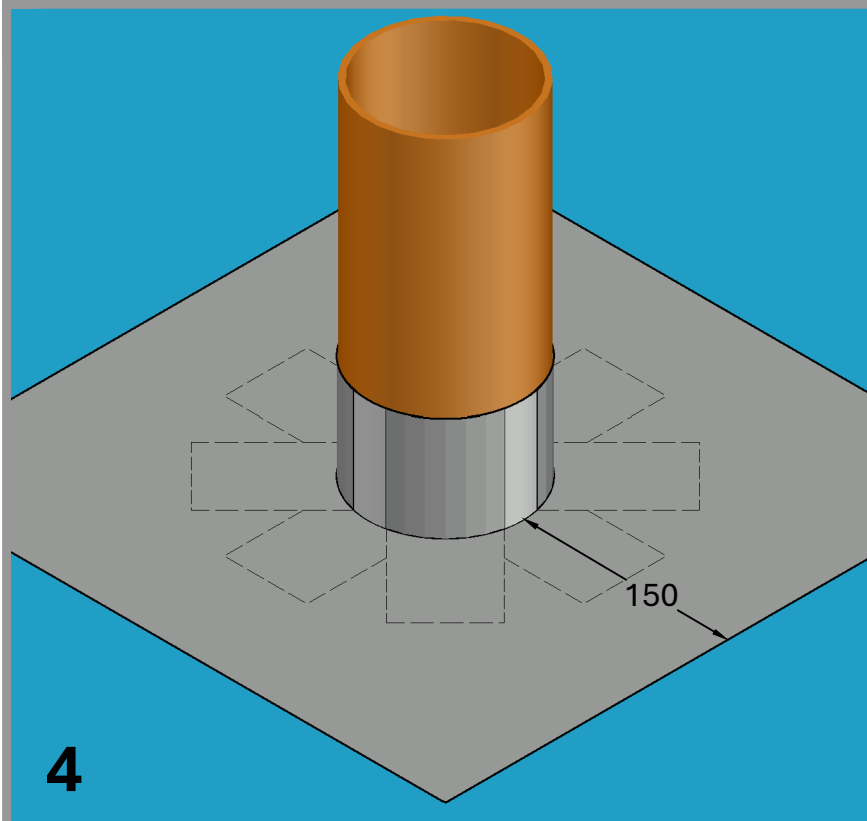
2

Bond 150mm x 75mm strips of Visqueen NF-Detailing Strip as shown. Strips to be bonded 75mm onto pipe and 75mm onto barrier.



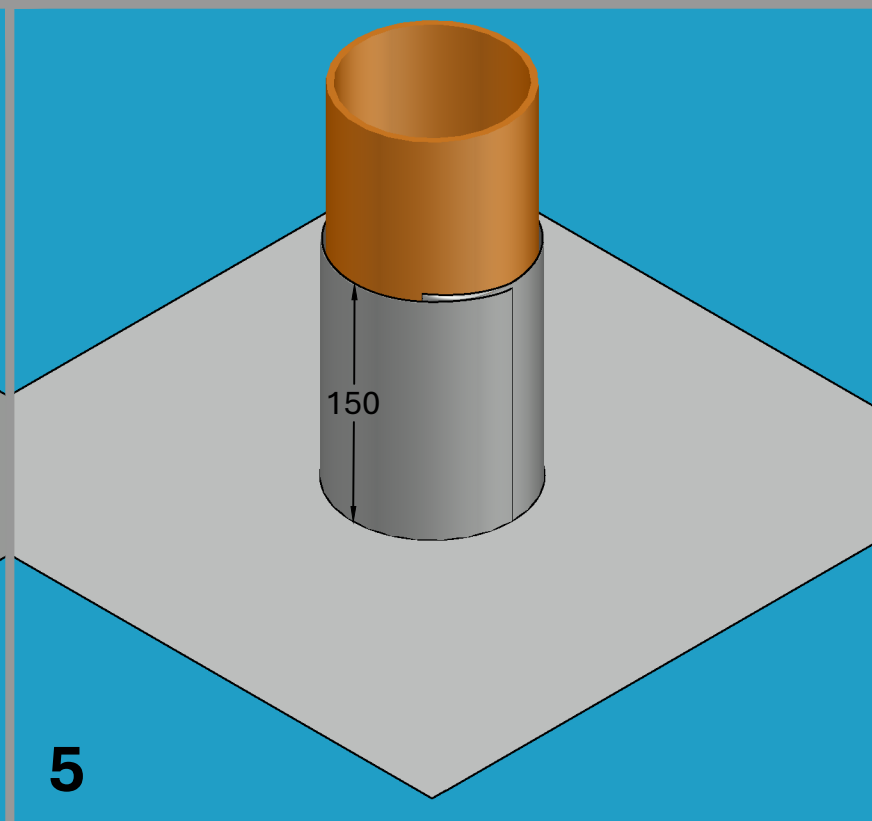
3

Bond additional strips overlapping previous strips by minimum 25mm.



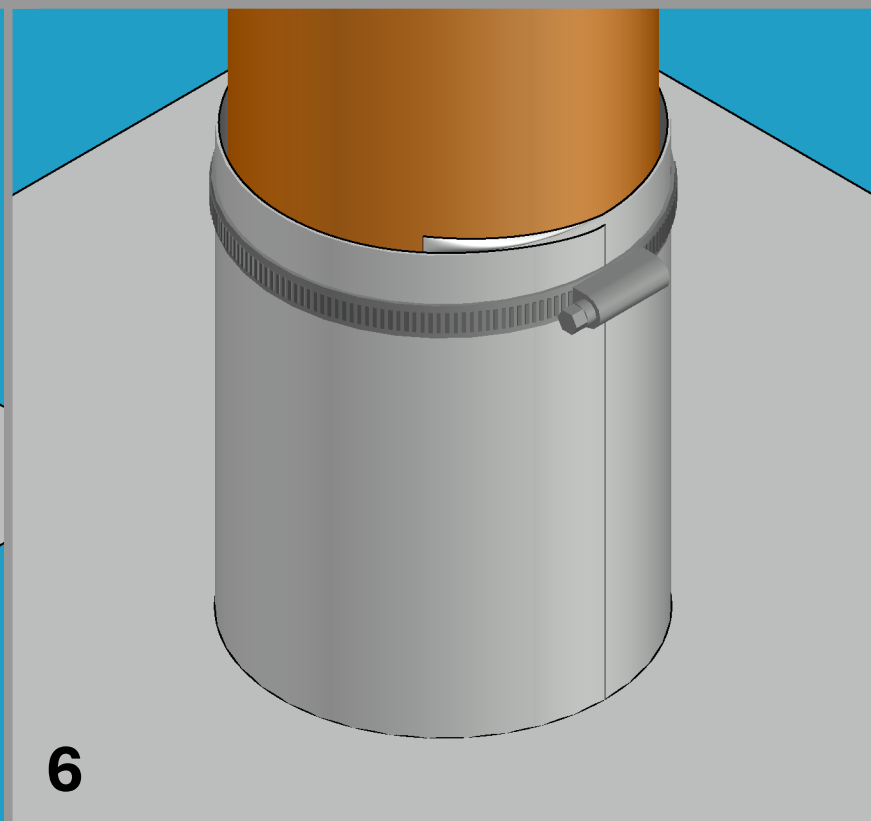
4

Cut central hole in a square of detailing strip. Square to extend minimum 150mm beyond base of pipe. Bond over horizontal strips and barrier.



5

Bond minimum 150mm detailing strip upstand collar around vertical strips and pipe.



6

Secure upstand collar with a mechanical fastening.

CRITICAL GUIDANCE NOTES

Visqueen Guidance Details are for illustration purposes only. It is the lead designer's responsibility to ensure Guidance Details are incorporated correctly into construction drawings.

Visqueen take no project design liability, or responsibility for the use of Guidance Details.

Drawing not to scale, use figured dimensions only. All figured dimensions are in millimetres.

British Standards are regularly updated. Visqueens' Guidance Details meet recommendations in place on date drawn.

Protection such as pressure relief or ventilation measures (not shown) may be necessary to meet the requirements of British Standards and industry guidance.

Each stage of the Visqueen NF-Detailing Strip installation to be rolled to ensure a full bond is achieved.

Visqueen TreadGUARD protection layer above barrier required as per specification.

Contact Visqueen Technical Services for further information.

Guidance Detail

Drawing No: NF400-81

Drawn by: JR

Approved: SD

Date drawn: August 2024

Visqueen provide a Contract Design Service where project specific drawings can be produced. Contact Visqueen Technical Services for further information.



Tel: 0333 202 6800
enquiries@visqueen.com
www.visqueen.com

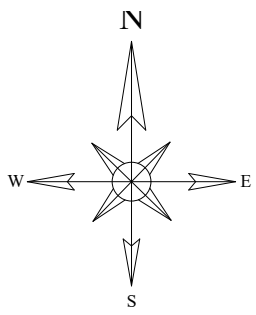
© Copyright reserved. This drawing may not be reproduced in part or amended without prior written permission.

VISQUEEN
A Berry Global Brand



SERVICE PIPE DETAILING USING VISQUEEN NF-DETAILING STRIP STEP BY STEP

APPENDIX I:
PWP Architects
DWG 1010F Proposed Site Plan



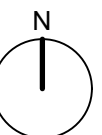
Works

Key

- Proposed Level
- Electric Vehicle charging point
- Permeable paving storage in sub-base
- Porous asphalt storage in sub-base

- Landlords supplies, power, water, CCTV etc.
- Central shared bin collection point - 6 no. Euro Bin - 3 general waste 3 recycling

notes:



NOTE: The contractor is responsible for checking all site dimensions and levels. These should be checked prior to the ordering of any components and before the commencement of the works. All discrepancies should be brought to the attention of the Contract Administrator

- revisions:
- A | 10.02.2022 | PT | Issued for Planning
 - B | 09.08.2022 | PT | Unit 8 parking amended
 - C | 30.01.2025 | PT | Updated for building control
 - D | 16.04.2025 | PT | New substation positioned, bin store relocated
 - E | 30.04.2025 | PT | Proposed substation repositioned
 - F | 30.04.2025 | PT | Issued for tender

revisions:

Trustees of The Alitex DBSSASS
Seagull Lane
Emsworth, Hampshire, PO10 7QH
drawing information title : **Proposed Site Plan**



PWP Architects Ltd 61 South Street, Havant, Hampshire PO9 1BZ
t: 02392 482494 f: 02392 481152
e: design@pwp-architects.com
w: www.pwp-architects.com

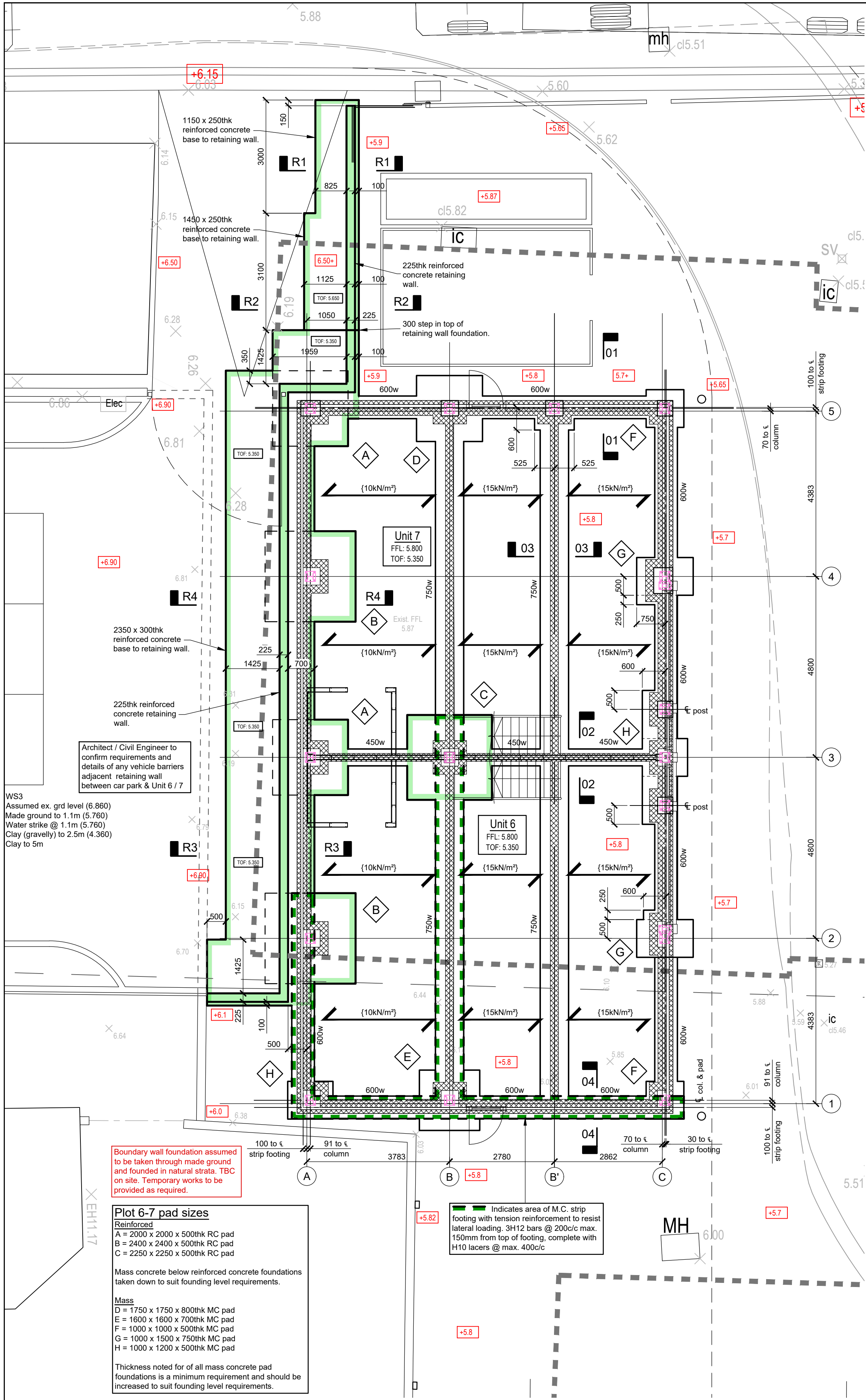
status :
date :
scale :
drawn :
checked :

Tender
November 21
1:200 @ A1
PT
IV

job: 5807 dwg: 1010 rev: F

APPENDIX J:
ANP Engineers
DWG 101, 102 & 103
General Arrangements - all units

Andrews Newby Partnership is the trading name of Andrews Newby Partnership Limited, registered in England and Wales, Company No 13098041, registered address Forder House, High Street, Burtton, Petersfield, Hampshire, GU31 5RX	
DRAWING No. 4888 / 103	REVISION A



R.C. FOUNDATIONS
Pad foundations noted thus on plan to be fully reinforced top, bottom and distribution, refer to bar bending schedules for reinforcement details.

MASS CONCRETE BLINDING UNDER FOUNDATIONS
All reinforced concrete to have minimum 50mm concrete blinding. Blinding increased to be taken down to founding level to suit requirements in box note.

SUSPENDED GROUND FLOOR SLAB
Indicates span of 225thk suspended reinforced concrete slab, refer to bar bending schedules for reinforcement details.
Allowable floor loading (by design) noted thus on plan: {15kN/m²}

Levels noted on plan provided by Civil Engineer (not within 'ANP' scope of works).
× 4.90 Indicates existing ground levels
+5.4 Indicates proposed ground levels

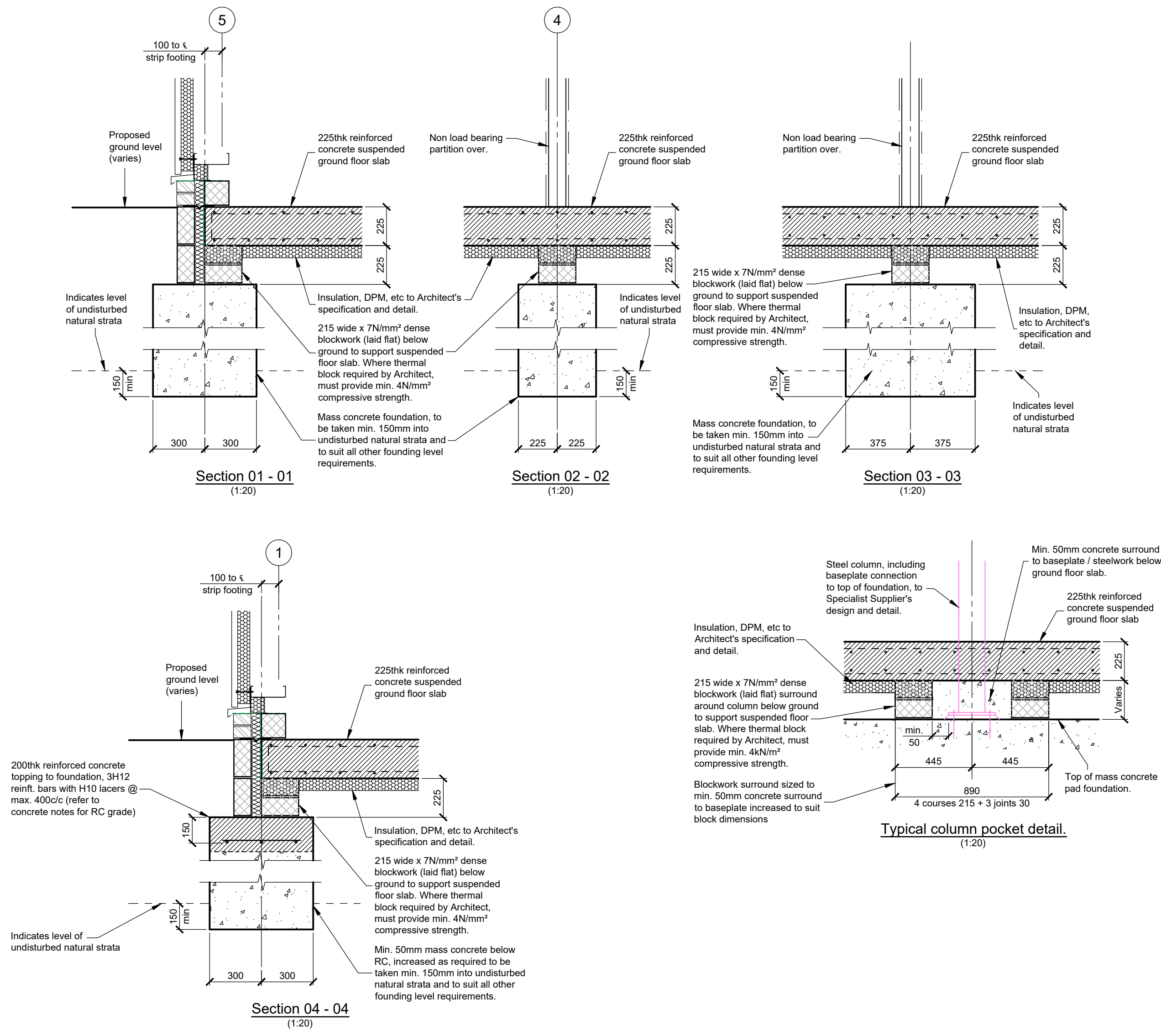
BOUNDARY WALLS
Design and details assume that all proposed foundations do not affect existing boundary walls or buildings. Contractor to carry out investigative works to confirm depth and location of all existing foundations within close proximity to buildings prior to commencing excavations of proposed foundations.

Load bearing masonry key - Substructure
100 / 215 x 7.0N/mm² dense concrete blocks (2000kg/m³) in 1:3:3 mortar. Where 215 wide blocks to be laid flat and coursed at 225 vertical centres.
Indicates non load bearing partitions over
External cavity walls to be tied using type 2 stainless steel wall ties at 750 horizontal and 450 vertical staggered crs in accordance with BS1243 and DD140:part 2.
All loadbearing masonry wall junctions to be fully bonded, including party walls. All non load bearing masonry to be bonded/tied in accordance with CL. 2.74: Part 'E' building regulations, 2003 edition.

Trench foundations widths noted thus on plan :- {750 w}
Top of foundation level to be confirmed by Architect to suit coursing
All dimensions on plan to gidlines unless noted otherwise.

The founding level is to be determined on site subject to the following provisos:
a. Minimum 150 into undisturbed natural ground capable of sustaining a ground bearing pressure of 100kN/m².
b. To suit the surrounding trees, in relation to the NHBC guidance; Part 4.2 "Building near trees" (High VCP)
c. Minimum 1000mm from F.G.L. to U/S of foundation
d. Foundation depth to be minimum ½ the foundation width
e. To the invert level of any adjacent drains.
f. 300mm minimum below any major roots in predominantly clay sub-soils.
g. To be agreed on site with the Building Control Officer.

For retaining wall elevations and sections R1 & R4 refer to drawing 102.1



- GENERAL**
- This drawing is copyright.
 - Do not scale from the drawing, work only to figured dimensions.
 - This drawing is to be read in conjunction with all other relevant Engineers and specialists drawings, details and specification.
 - For all setting out dimensions and building work details refer to Architect's drawings and specifications.
 - The Main Contractor is responsible for verifying the dimensions on site before commencement.
 - All design construction and management to be in accordance with the C.D.M Regulations, 2015.
 - Main Contractor to undertake an initial survey and trial excavations prior to any work commencing to determine exact position and depth of all existing underground services in the area of the site.

- CONCRETE**
- All concrete is to be in accordance with BS 8500-1 & 2:2006
 - Reinforced concrete has been designed in accordance with BS 8110-1:1997.
 - Concrete must be installed in accordance with the latest standards; BS EN 13670 & BS EN 206:2013, in particular, shutter striking times, working in cold temperatures etc.
 - 50mm concrete blinding is to be provided under all R.C. work.
- Reinforced Concrete to be designated mix reference RC28/35, to minimum strength class of C28/35N/mm² at 28 days, minimum O.P.C. content of 200kg/m³, maximum aggregate size of 20mm, max free water/cement ratio of 0.6, slump class of S3, all in accordance with BS 8500-2:2006, sulphate class of AC-2, DS-2.
- Unreinforced (mass concrete) Foundations to be designated mix reference GEN3, to minimum strength class of C16/20N/mm² at 28 days, minimum O.P.C. content of 220kg/m³, maximum aggregate size of 20mm, slump class of S3, all in accordance with BS 8500-2:2006, sulphate class of AC-2, DS-2.

- FOUNDATIONS**
- The Main Contractor to ensure that the ground bearing strata, minimum bearing depths and general recommendations of the soil investigation are adhered to.
 - The Main Contractor to undertake exploratory excavations adjacent to any existing buildings and services to determine nature and depth of existing footings etc. Contractor to ensure that all foundations to existing buildings and underground services are not undermined or disturbed in any way during the construction of works.
 - Contractor to be responsible for all temporary works during construction of the superstructure and foundations to ensure that all adjacent buildings, roads, footpaths and services etc. remain stable and free from damage.
 - Foundation design to suit HIGH volume change potential in soils, where CLAY is present.
 - All formation levels, shutters and reinforcement to be checked on site by the Building Control Officer prior to construction.
 - Any excavations liable to remain exposed to the elements in excess of 24 hours prior to concreting (or less in inclement weather) are to receive 50mm protective blinding concrete.
 - In cohesive soils the vertical faces of all excavations must be sufficiently smooth to allow movement of the soil to take place without disturbing the foundation.
 - New foundations are to be stepped in accordance with Part A, Section 1E, of the Building Regulations.
 - Foundations may be trench filled but the top level of concrete must suit brick coursing and final ground levels.
 - No service may be built through or cast into foundations without the Engineers approval.
 - If it is intended to use proprietary specialist slab shutters additional care shall be afforded to the formation of the ground beam and the recommendations of the Specialist Suppliers.
 - Both the alignment and provision of adequate side cover is to be achieved by the sensible use of proprietary spacers. The use of continuous plastic track spacer is prohibited.

- MASONRY**
- All masonry is designed, and shall be constructed in accordance with BS 5628-1:2005 plus all latest amendments, including adequate restraint as detailed in Annex D.
 - Brick and block strengths shown are minimum required for that section of walling.
 - Test certificates confirming brick and block crushing strengths will be required for the Engineers approval.
 - Walls below ground level are to be built up in dense concrete blockwork inner and outer leaves in class (i) mortar, with lean mix concrete cavity fill up to 150mm below ground level.
 - Where blockwork walling below ground is in excess of 900mm high, then 215mm thick blockwork is to be adopted, using blocks laid flat and coursed at 225mm vertical centres. Backfilling is to be carried out equally either side of the walling and is to be of an approved, well graded, granular material.
 - Horizontal chasing of walling will not be accepted unless written approval is obtained from the Engineer.

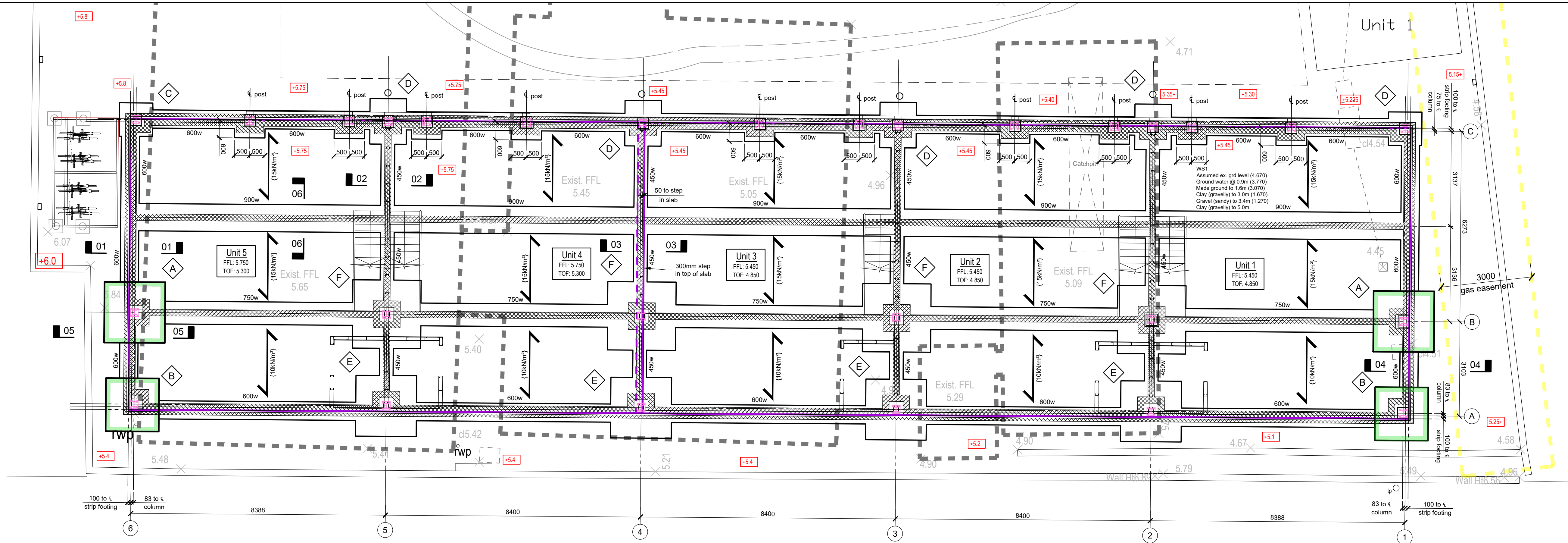
- POWER FLOAT FINISH SLABS**
- Cement to be BS 12 supplied by B.S.I. registered company.
 - Fine aggregate to be to BS 882 coarse or very fine grading to be avoided. Sand to be free of soft materials i.e. sandstone, limestone or lignite and free unweathered fines.
 - Coarse aggregate having soft sandstone and limestone and aggregates giving a drying shrinkage of concrete greater than 0.06% to be avoided.
 - Power float slab finish with surface dustproofhardener, and oil resistant sealer. All to be applied in strict accordance with manufacturers written recommendations. Tolerances to be ± 3mm overall and a 3mm over 3.0m straight edge (min. Category 2).
 - Concrete quality to be proportioned to minimise wet segregation and bleeding of free water to the surface of the slab. Water cement ratio to be determined by the contractor to suit workability requirements and construction method. The slump should not exceed 50mm.
 - Curing to commence immediately after finishing is complete. Care to be taken to ensure that plastic cracking, dusting and drying shrinkage does not occur and that early drying out of the surface does not occur.
 - Curing should continue for at least 7 days, with special attention being paid to the environmental conditions and temperatures.
 - Curing to be by the use of plastic sheeting placed on the slab surface as soon as the surface is stiff enough not to be marked.

A	23.05.25	Issued for construction	JM
P2	14.05.25	Issued for comment / co-ordination	JM
P1	25.04.25	Issued for comment / co-ordination	JM
MK	DATE	REVISION	BY

JOB TITLE	2-6 Seagull Lane, Emsworth PO10 7QH
CLIENT	M&M Hall Family Pension Trust

SCALES	1:75 1:50 1:20	DRG. SIZE	A1
DATE	Jan 25	ENG / TECH	RC / JM
DRAWING TITLE	Unit 6 & 7 + Retaining wall General arrangement & details		

DRAWING TITLE	
Unit 6 & 7 + Retaining wall General arrangement & details	
STRUCTURAL AND CIVIL CONSULTING ENGINEERS	
Forder House, High Street, Burton, Petersfield, Hampshire GU31 5RX	Telephone: 01730 266944 www.andrewsnewby.co.uk
 ANDREWS NEWBY PARTNERSHIP	
Andrews Newby Partnership is the trading name of Andrews Newby Partnership Limited, registered in England and Wales, Company No 13098041, registered address Forder House, High Street, Burton, Petersfield, Hampshire, GU31 5RX	
DRAWING No.	4888 / 102
REVISION	A



Plot 1-5 pad sizes
Reinforced
A = 2000 x 2000 x 500thk RC pad
B = 1750 x 1750 x 500thk RC pad
Mass concrete below reinforced concrete foundations taken down to suit founding level requirements.
Mass
C = 1100 x 1100 x 500thk MC pad
D = 1200 x 1500 x 750thk MC pad
E = 2000 x 2000 x 900thk MC pad
F = 2250 x 2250 x 500thk MC pad
Thickness noted for all mass concrete pad foundations is a minimum requirement and should be increased to suit founding level requirements.
All pad foundations centred under columns unless noted otherwise.

R.C. FOUNDATIONS
Pad foundations noted thus on plan to be fully reinforced top, bottom and distribution, refer to bar bending schedules for reinforcement details.

MASS CONCRETE BLINDING UNDER FOUNDATIONS
All reinforced concrete to have minimum 50mm concrete blinding. Blinding increased to be taken down to founding level to suit requirements in box note.

SUSPENDED GROUND FLOOR SLAB
Indicates span of 225thk suspended reinforced concrete slab, refer to bar bending schedules for reinforcement details.
Allowable floor loading (by design) noted thus on plan: (15kN/m²)

Levels noted on plan provided by Civil Engineer (not within 'ANP' scope of works).
X 4.90 Indicates existing ground levels
+5.4 Indicates proposed ground levels

BOUNDARY WALLS
Design and details assume that all proposed foundations do not affect existing boundary walls or buildings. Contractor to carry out investigative works to confirm depth and location of all existing foundations within close proximity to buildings prior to commencing excavations of proposed foundations.

Load bearing masonry key - Substructure
100 / 215 x 7.0N/mm² dense concrete blocks (2000kg/m³) in 1:1/3 mortar. Where 215 wide blocks to be laid flat and coursed at 225 vertical centres.
Indicates non load bearing partitions over.
External cavity walls to be tied using type 2 stainless steel wall ties at 750 horizontal and 450 vertical staggered crs in accordance with BS1243 and DD140: part 2.
All loadbearing masonry wall junctions to be fully bonded, including party walls. All non load bearing masonry to be bonded in accordance with CL 2.74; Part 'E' building regulations, 2003 edition.

Trench foundations widths noted thus on plan :- (750 w)
Top of foundation level to be confirmed by Architect to suit coursing
All dimensions on plan to gidlines unless noted otherwise.

The founding level is to be determined on site subject to the following provisos:
a. Minimum 150 into undisturbed natural ground capable of sustaining a ground bearing pressure of 100kN/m².
b. To suit the surrounding trees, in relation to the NHBC guidance; Part 4.2 "Building near trees" (High VCP)
c. Minimum 1000mm from F.G.L. to U/S of foundation
d. Foundation depth to be minimum ½ the foundation width
e. To the invert level of any adjacent drains.
f. 300mm minimum below any major roots in predominantly clay sub-soils.
g. To be agreed on site with the Building Control Officer.

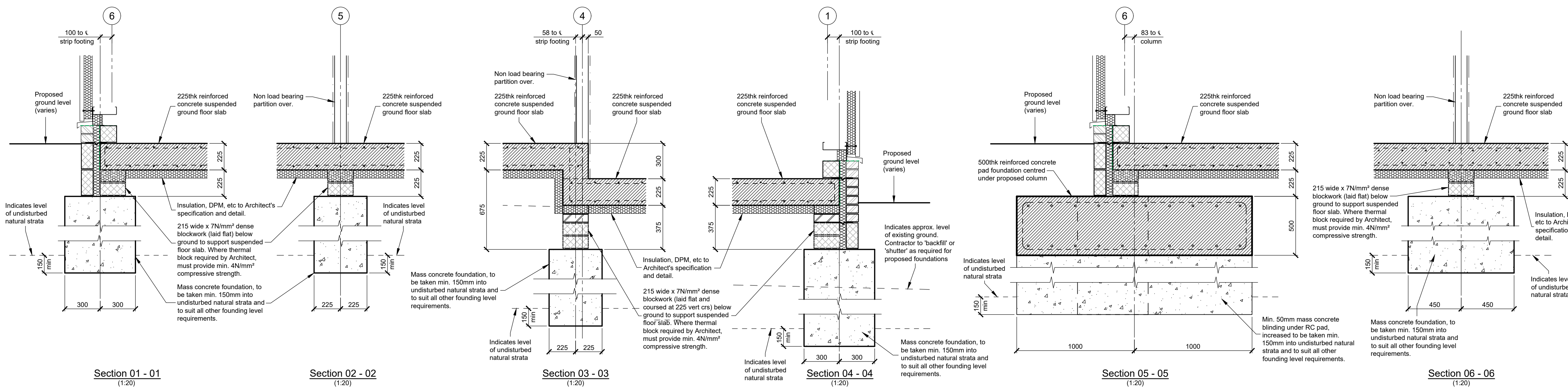
- GENERAL**
- This drawing is copyright.
 - Do not scale from the drawing, work only to figured dimensions.
 - This drawing is to be read in conjunction with all other relevant Engineers and Specialists drawings, details and specification.
 - For all setting out dimensions and building work details refer to Architect's drawings and specifications.
 - The Main Contractor is responsible for verifying the dimensions on site before commencement.
 - All design construction and management to be in accordance with the C.D.M Regulations, 2015.
 - Main Contractor to undertake an initial survey and trial excavations prior to any work commencing to determine exact position and depth of all existing underground services in the area of the site.

- CONCRETE**
- All concrete is to be in accordance with BS 8500-1 & 2-2006
 - Reinforced concrete has been designed in accordance with BS 8110-1:1997.
 - Concrete must be installed in accordance with the latest standards; BS EN 13670 & BS EN 206: 2013, in particular, shutter striking times, working in cold temperatures etc.
 - 50mm concrete blinding is to be provided under all R.C. work.
Reinforced Concrete to be designated mix reference RC28/35, to minimum strength class of C28/35N/mm² at 28 days, minimum O.P.C. content of 280kg/m³, maximum aggregate size of 20mm, max free water/cement ratio of 0.6, slump class of S3, all in accordance with BS 8500-2:2006, sulphate class of AC-2, DS-2.
Unreinforced (mass concrete) Foundations to be designated mix reference GEN3, to minimum strength class of C16/20N/mm² at 28 days, minimum O.P.C. content of 220kg/m³, maximum aggregate size of 20mm, slump class of S3, all in accordance with BS 8500-2:2006, sulphate class of AC-2, DS-2.

- FOUNDATIONS**
- The Main Contractor to ensure that the ground bearing strata, minimum bearing depths and general recommendations of the soil investigation are adhered to.
 - The Main Contractor to undertake exploratory excavations adjacent to any existing buildings and services to determine nature and depth of existing footings etc. Contractor to ensure that all foundations to existing buildings and underground services are not undermined or disturbed in any way during the construction of works.
 - Contractor to be responsible for all temporary works during construction of the superstructure and foundations to ensure that all adjacent buildings, roads, footpaths and services etc. remain stable and free from damage.
 - Foundation design to suit HIGH volume change potential in soils, where CLAY is present.
 - All formation levels, shutters and reinforcement to be checked on site by the Building Control Officer prior to construction.
 - Any excavations liable to remain exposed to the elements in excess of 24 hours prior to concreting (or less in inclement weather) are to receive 50mm protective blinding concrete.
 - In cohesive soils the vertical faces of all excavations must be sufficiently smooth to allow movement of the soil to take place without disturbing the foundation.
 - New Foundations are to be stepped in accordance with Part A, Section 1E, of the Building Regulations.
 - Foundations may be trench filled but the top level of concrete must suit brick coursing and final ground levels.
 - No service may be built through or cast into foundations without the Engineers approval.
 - If it is intended to use proprietary specialist side shutters additional care shall be afforded to the formation of the ground beam and the recommendations of the Specialist Suppliers.
 - Both the alignment and provision of adequate side cover is to be achieved by the sensible use of proprietary spacers. The use of continuous plastic track spacer is prohibited.

- MASONRY**
- All masonry is designed, and shall be constructed in accordance with BS 5628-1:2005 plus all latest amendments, including adequate restraint as detailed in Annex 'D'.
 - Brick and block strengths shown are minimum required for that section of walling.
 - Test certificates confirming brick and block crushing strengths will be required for the Engineers approval.
 - Walls below ground level are to be built up in dense concrete blockwork inner and outer leaves in class (i) mortar, with lean mix concrete cavity fill up to 150mm below ground level.
 - Where blockwork walling below ground is in excess of 900mm high, then 215mm thick blockwork is to be adopted, using blocks laid flat and coursed at 225mm vertical centres. Backfilling is to be carried out equidistantly either side of the walling and is to be of an approved, well graded, granular material.
 - Horizontal chasing of walling will not be accepted unless written approval is obtained from the Engineer.

- POWER FLOAT FINISH SLABS**
- Cement to be BS 12 supplied by B.S.I. registered company.
 - Fine aggregate to be to BS 882 coarse or very fine grading to be avoided. Sand to be free of soft materials i.e. sandstone, limestone or lignite and free unweathered fines.
 - Coarse aggregate having soft sandstone and limestone and aggregates giving a drying shrinkage of concrete greater than 0.06% to be avoided.
 - Power float slab finish with surface dustproofhardener, and oil resistant sealer. All to be applied in strict accordance with manufacturers written recommendations. Tolerances to be ± 3mm overall and ± 3mm over 3.0m straight edge (min. Category 2).
 - Concrete quality to be proportioned to minimise wet segregation and bleeding of free water to the surface of the slab. Water cement ratio to be determined by the contractor to suit workability requirements and construction method. The slump should not exceed 50mm.
 - Curing to commence immediately after finishing is complete. Care to be taken to ensure that plastic cracking, dusting and drying shrinkage does not occur and that early drying out of the surface does not occur.
 - Curing should continue for at least 7 days, with special attention being paid to the environmental conditions and temperatures.
 - Curing to be by the use of plastic sheeting placed on the slab surface as soon as the surface is stiff enough not to be marked.



A	23.05.25	Issued for construction		JM
P1	25.04.25	Issued for comment / co-ordination		JM
MK	DATE	REVISION		BY
JOB TITLE				
2-6 Seagull Lane, Emsworth PO10 7QH				
CLIENT				
M&M Hall Family Pension Trust				
SCALES		DRG. SIZE		
1:75 1:20		A1		
DATE	Jan 25	ENG / TECH	CHECKED	
		RC / JM		
DRAWING TITLE				
Unit 1 to 5 Substructure general arrangement and details				
STRUCTURAL AND CIVIL CONSULTING ENGINEERS				
Forder House, High Street, Burton, Petersfield, Hampshire GU31 5RX		Telephone: 01730 266944 www.andrewsnewby.co.uk		
		 ANDREWS NEWBY PARTNERSHIP		
Andrews Newby Partnership is the trading name of Andrews Newby Partnership Limited, registered in England and Wales, Company No 13098041, registered address Forder House, High Street, Burton, Petersfield, Hampshire, GU31 5RX				
DRAWING No.		REVISION		
4888 / 101		A		