ROK PLANNING

SUSTAINABLE DESIGN AND CONSTRUCTION STATEMENT

In respect of

SOMERSET COURT, ALDENHAM STREET, LONDON, NW1 1AS

On behalf of

UNITE STUDENTS

Prepared by:	**EM/AP**
Authorised by:	**MR**
Date/Status:	**06th September 2024**
Project Number:	**R00221**

CONTENTS

1. INTRODUCTION

1.1 This Sustainable Design and Construction Statement has been prepared on behalf of Unite Students, (hereafter, “the applicant”) in support of a full planning application located at Somerset Court, Aldenham Street, London, NW1 1AS.

1.2 The application seeks planning permission for:

“Re-cladding and façade remediation works.”

1.3 This Statement should be read in conjunction with the Covering Letter prepared by ROK Planning and submitted with the application.

1.4 The purpose of this statement is to demonstrate how the proposed development aligns with the sustainability requirements outlined in Camden Council’s Local Plan, specifically Policy CC1 on Climate Change Mitigation.

1.5 The proposed works aim to enhance the thermal efficiency and overall sustainability of the building, which currently provides accommodation for 168 students and includes both en-suite rooms in shared flats and studios.

1.6 Proposed wall details and material specifications can be found at Appendix A and Appendix B respectively.

1.7 This document outlines the proposed schemes compliance with the relevant sustainability policies.

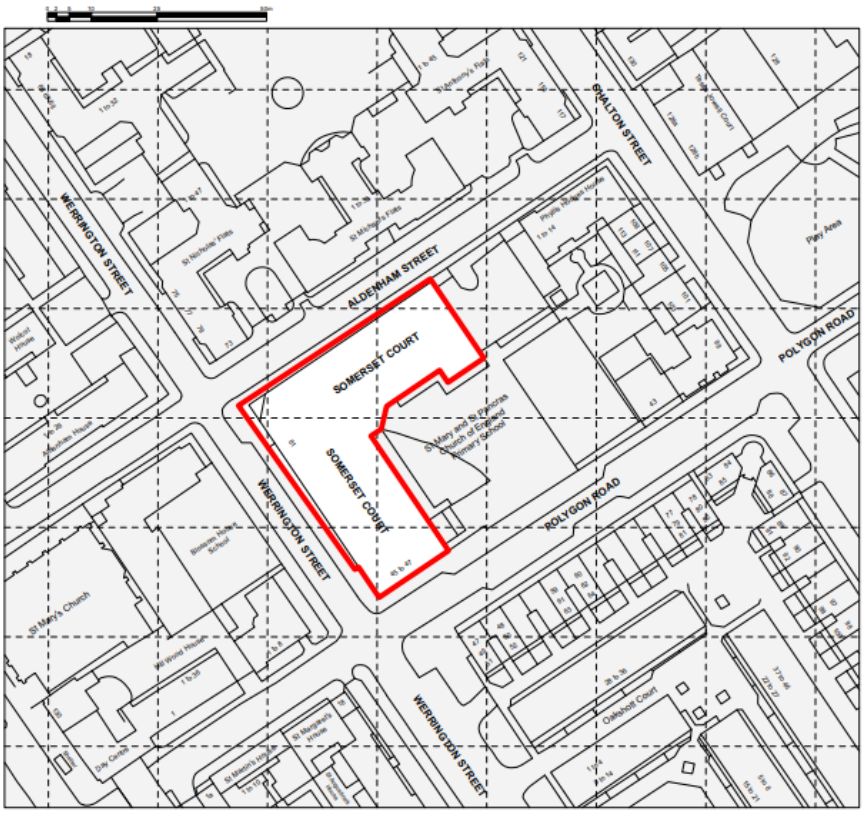
2. SITE AND SURROUNDINGS

2.1 The application site relates to a five – six storey 'L' shaped building located on Aldenham Street and Werrington Street.

2.2 The property provides accommodation to 168 students, offering both en-suite rooms in shared flats and studios. The St Mary and St Pancras CoE primary school and childrens centre are located on the lower two floors of the building and student accommodation occupies the upper four storeys of the Werrington Street wing and the upper five storeys of the Aldenham Street wing.

2.3 The Main entrance to the building is accessed at ground floor level directly on the corner of both Aldenham and Werrington Street.

2.4 The building is not listed and is not within a Conservation Area. Planning permission was granted in 2005 for the redevelopment of the site to erect the current buildings on site.



LOCATION PLAN

scale: 1:1250

2.5 The building is currently clad in a diverse range of materials consisting of Face Brick, Insulated Render, Soft wood timber boarding, Aluminium cladding panels and glazed and aluminium spandrel panels.

3. PLANNING POLICY

3.1 This document has been produced to satisfy the Sustainable Design requirements of Camden Council's Local Plan – Chapter 8. There is also relevant national planning policy that the scheme and this document also consider.

National Planning Policy Framework (2023)

3.2 National planning policy is set within the National Planning Policy Framework (NPPF). At the centre of the NPPF is a presumption in favour of sustainable development. To deliver sustainable development, local and national policies must be adhered to and taken into account at all stages of development.

Local Planning Policy

3.3 The statutory development plan for the application site consists of the Camden Local Plan (2017). Other material considerations include the National Planning Policy Framework (NPPF) 2023, National Planning Practice Guidance (NPPG), the London Plan (2021) and relevant supplementary planning documents, Camden Planning Guidance (2021) documents – Amenity, Design, Housing, Home Improvements, Transport, Employment Sites and Business Premises.

3.4 Camden Council are currently consulting on their Regulation 18 Draft New Local Plan. This is the first full consultation stage of the Plan, and the consultation ran until 5pm on 13th March 2024. Following this there will be one further Regulation 19 (publication) stage consultation, with the Plan then being submitted to the Planning Inspectorate for examination. At this time, the emerging policies carry very little weight in the determination of planning applications

3.5 Policy CC1 of the Camden Local Plan (2017) focuses on minimising the effects of climate change through sustainable construction practices and energy efficiency improvements. It encourages developments to meet high environmental standards.

3.6 The policy promotes zero carbon development and requires all development to reduce carbon dioxide emissions by following the energy hierarchy.

3.7 The Council supports and encourages sensitive energy efficiency improvements to existing buildings. All developments are expected to optimise resource efficiency.

3.8 The energy hierarchy is a sequence of steps to minimise the energy consumption of a building: be lean (use less energy), be clean (supply energy efficiently), and be green (use renewable energy). The Council commissioned two borough-wide

carbon reduction studies to align local planning policy with national carbon emissions reduction targets.

3.9 Developments should optimise resource efficiency by reducing waste, minimising materials required, using materials with low embodied carbon content, and enabling low energy and water demands once the building is in use. Embodied carbon includes the carbon impact associated with the production, transport, assembly, use, and disposal of materials.

3.10 The following section outlines how the proposed scheme at Somerset Court has addressed sustainability.

4. DESIGN AND CONSTRUCTION RESPONSE

Policy CC1: Climate Change Mitigation

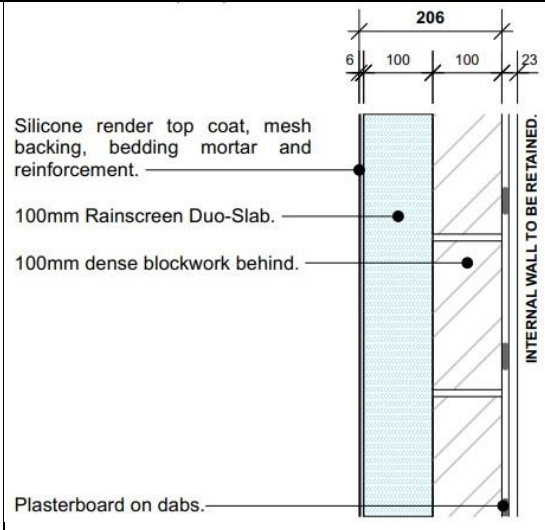
4.1 Policy CC1 states:

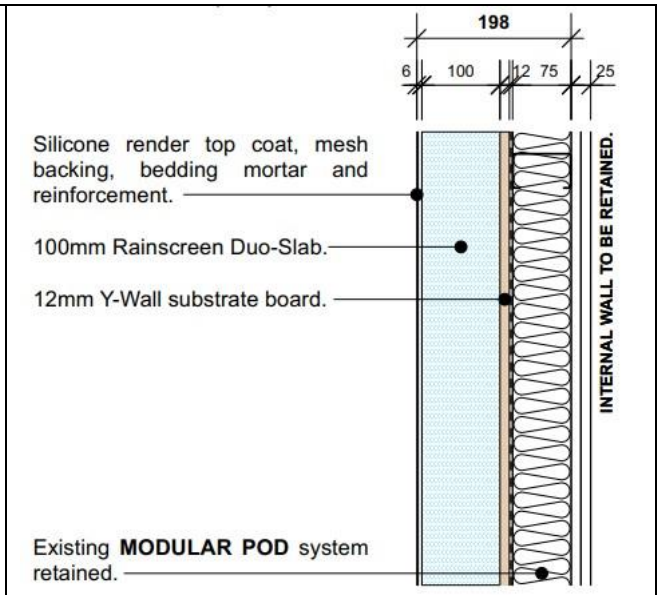
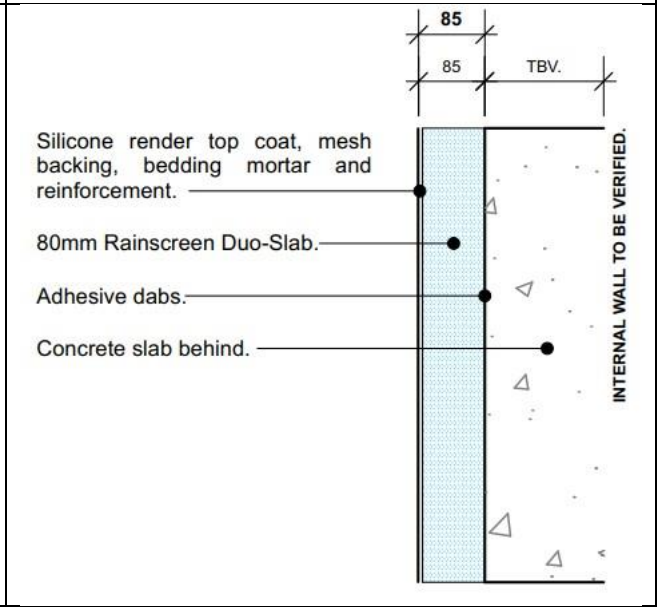
"The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation."

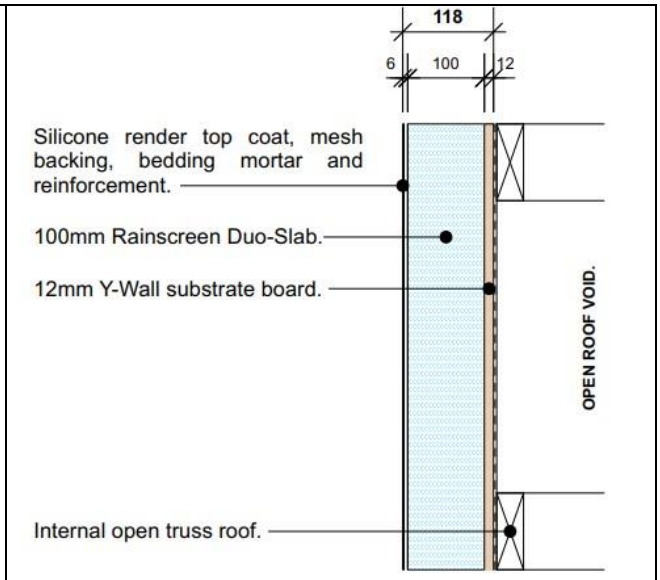
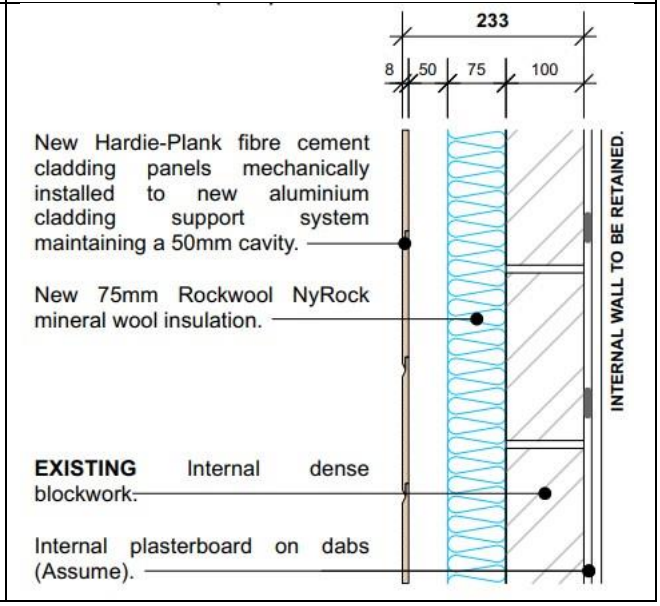
This includes

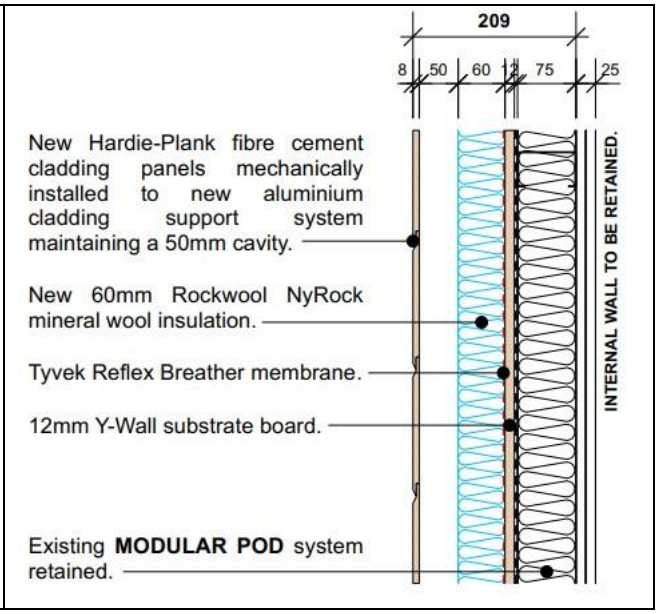
'Expecting all developments to optimise resource efficiency'

4.2 In line with Policy CC1, construction materials have been selected minimise the effects of climate change and maximise resource efficiency. The proposed construction details for the development are as follows:

Element	**Type**	**U-Value W/(m²·K)**	**Illustration of inhomogeneous layers to assist in visualising the arrangement**
SECTION: WT - EW01a	Render on Blockwork	0.30	

SECTION: WT - EW01b	Render to Modular Pod	0.26	
SECTION: WT - EW01c	Render on Concrete slab	0.34	

SECTION: WT - EW01d	Render at Roof level	3.85	
SECTION: WT - EW02a	Timber Style Board on Blockwork	0.35	

SECTION: WT - EW02b	Timber Style Board to Modular Pod	0.34	

4.3 The proposed construction methods and materials largely align with Policy CC1's objectives of minimising the effects of climate change and promoting sustainable practices. The use of rainscreen systems and Rockwool insulation across different wall builds demonstrates a commitment to improving thermal efficiency and reducing energy consumption, with U values indicating generally good thermal performance. Retention of existing structures, such as modular pods and roof trusses, supports resource efficiency and minimises waste, aligning with the policy's emphasis on optimising resource use.

1.8 Proposed wall details and material specifications can be found at Appendix A and Appendix B respectively.

4.4 Out of the 7 construction materials included within the cladding application, 3 are being retained from the existing structure. The 3 retained materials are B1 Face Brickwork, P1 Aluminium panels, and P2 window/door frames.

4.5 The 4 other construction materials (B2 Hardie Plank, B2 Cedral Lap/ Click, R1, R3 silicone Render and Rockwool Insulation) have each been chosen on there ability to be recycled, estimated service life and embodied carbon.

4.6 The B2 Hardie Plank has an estimated service life of 15 years and requires a low amount of maintenance. It can be partially recycled and holds 7.17kg C02 of embodied carbon.

4.7 The B2 Cedral Lap/Click has an estimated service life of 30 years with a low amount of maintenance required. It can be partially recycled with 95% of the screws able to be recycled. It holds 11.43kg C02 of embodied carbon.

4.8 R1, R3 Silicone Render has an estimated service life of at least 30 years. The silicone render is not fully recyclable which, whilst possible to recycle, degrades after each sue and requires specialist recycling to be properly recycled.

4.9 ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. No maintenance is required, and it has an estimated service life of over 50 years. Its embodied carbon is 1.31kg C02.

4.10 On this basis, the majority of the materials are highly sustainable and efficient in nature.

4.11 The development is considered to address circular economy principles as well as recycled and re-used content. The proposed materials are highly sustainable, requiring little to no maintenance and all possessing lifespans of multiple decades. Thus, complying with Policy CC1 of the Local Plan.

5. CONCLUSION

5.1 This Sustainable Design and Construction Statement has been developed in line with the relevant policies in the National Planning Policy Framework (2023) and the Camden Local Plan (2017).

5.2 The proposed re-cladding and façade remediation works satisfy all the relevant targets set out by London Borough of Camden Council as well as National Planning Policy.

5.3 In summary, the proposed re-cladding and façade remediation works at Somerset Court have been meticulously planned to align with the sustainability requirements outlined by Camden Council's Local Plan, specifically Policy CC1 on Climate Change Mitigation. This Sustainable Design and Construction Statement demonstrates the project's commitment to minimising the effects of climate change through the careful selection of construction materials and methods.

5.4 **Material Selection**: The construction materials have been chosen based on their ability to reduce embodied carbon, enhance energy efficiency, and ensure longevity. Materials such as ROCKWOOL insulation, with its high recyclability and long service life, exemplify this approach.

5.5 **Thermal Performance**: The U-values of the proposed materials indicate substantial improvements in thermal efficiency, which will significantly reduce energy consumption and greenhouse gas emissions.

5.6 **Resource Efficiency**: The retention and reuse of existing materials, such as B1 Face Brickwork and P1 Aluminium panels, underscore the project's adherence to resource optimisation principles, reducing waste and minimising the need for new materials.

5.7 **Lifecycle Considerations**: The materials selected for the new construction, including B2 Hardie Plank and Cedral Lap/Click, have been evaluated for their durability, maintenance requirements, and recyclability, ensuring they meet high environmental standards.

5.8 **Compliance with Planning Policies**: The project aligns with both local and national planning policies aimed at promoting sustainable development. By following the energy hierarchy—be lean, be clean, be green—the development aims to achieve a high standard of environmental performance.

5.9 Overall, the proposed development at Somerset Court reflects a strong commitment to sustainability, addressing climate change mitigation through thoughtful design and construction practices. The project not only meets but exceeds the expectations set forth by Camden Council's sustainability policies, ensuring a positive environmental impact and a resilient built environment for the future.

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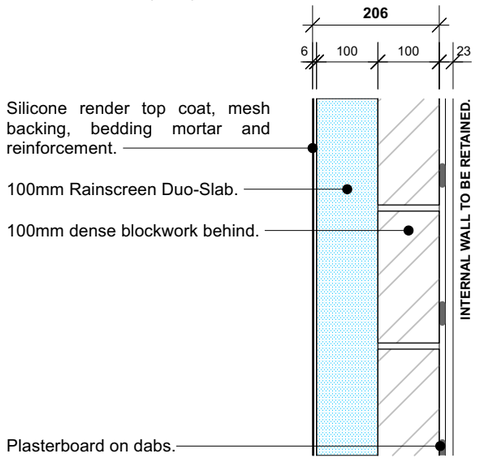
APPENDIX A

SECTION: WT - EW01a.

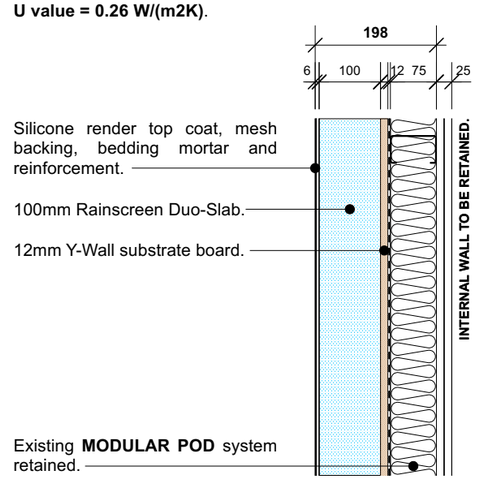
RENDER ON BLOCKWORK.
U value = 0.30 W/(m2K).



WALL BUILD-UP:
Silicone render top coat on mesh backing on:
Bedding mortar and reinforcement
100mm Rainscreen Duo-Slab mechanically fixed to:
EXISTING Internal dense blockwork.
Plasterboard on dabs (assumed).

SECTION: WT - EW01b.

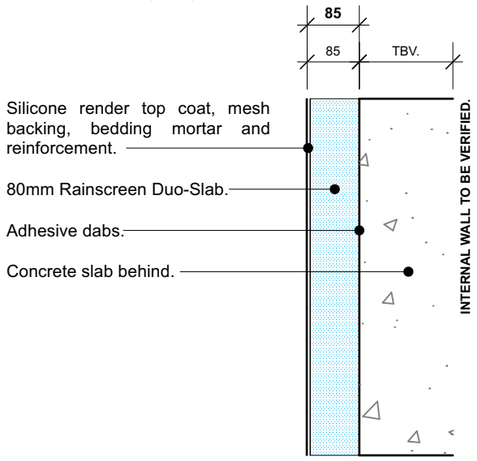
RENDER TO MODULAR POD.
U value = 0.26 W/(m2K).



WALL BUILD-UP:
Silicone render top coat on mesh backing on:
Bedding mortar and reinforcement
100mm Rainscreen Duo-Slab mechanically fixed to:
12mm Y-Wall substrate board screw fixed onto:
EXISTING MODULAR POD RETAINED.

SECTION: WT - EW01c.

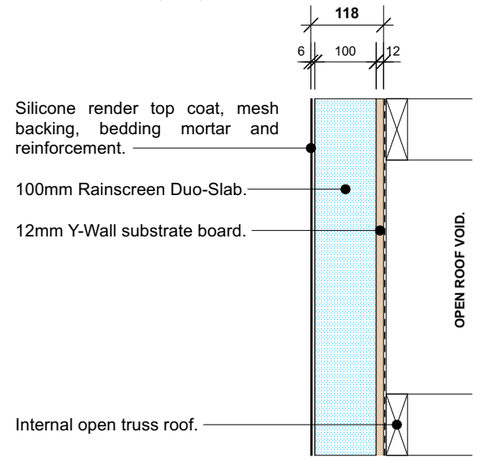
RENDER ON CONCRETE SLAB.
U value = 0.34 W/(m2K).



WALL BUILD-UP:
Silicone render top coat on mesh backing on:
Bedding mortar and reinforcement
80mm Rainscreen Duo-Slab mechanically and glue fixed to:
EXISTING Concrete slab behind.

SECTION: WT - EW01d.

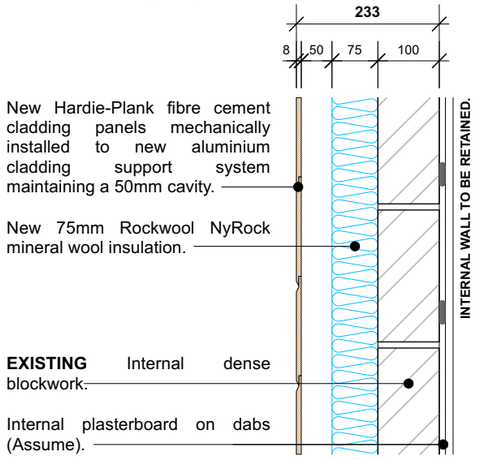
RENDER - AT ROOF LEVEL.
U value = 3.85 W/(m2K).



WALL BUILD-UP:
Silicone render top coat on mesh backing on:
Bedding mortar and reinforcement
100mm Rainscreen Duo-Slab mechanically fixed to:
12mm Y-Wall substrate board screw fixed onto:
Breather membrane - black (existing).
EXISTING Softwood truss rafters - open roof void.

SECTION: WT - EW02a.

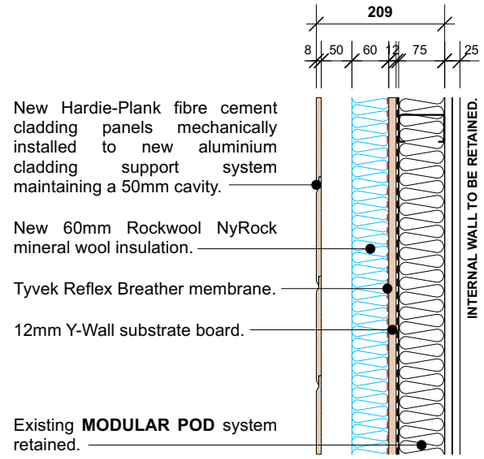
TIMBER STYLE BOARD ON BLOCKWORK.
U value = 0.35 W/(m2K).



WALL BUILD-UP.
New Hardie-Plank cladding panels mechanically fixed to:
New aluminium cladding support system.
New 75mm Rockwool NyRock mineral wool insulation fixed to:
EXISTING Internal dense blockwork.
Plasterboard on dabs (assumed).

SECTION: WT - EW02b.

TIMBER STYLE BOARD TO MODULAR POD.
U value = 0.34 W/(m2K).



WALL BUILD-UP.
New Hardie-Plank cladding panels mechanically fixed to:
New aluminium cladding support system.
New 60mm Rockwool NyRock mineral wool insulation fixed to:
Tyvek Reflex Breather membrane.
12mm Y-Wall substrate board screw fixed onto:
EXISTING MODULAR POD RETAINED.

WALL TYPE REFERENCES:

EW01a - Insulated Render (Blockwork).
EW01b - Insulated Render (Pod unit).
EW01c - Insulated Render (Concrete).
EW01d - Insulated Render (Roof Void).

EW02a - Timber style boards (Blockwork).
EW02b - Timber style boards (Pod unit).

Rev	Date	Description	By	Chk

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Tel. 01273 479434 www.axiomarchitects.co.uk

Client
M.CLARKE.

Project
UNITE STUDENTS, SOMERSET COURT,
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LONDON, NW1 1AS.

Drawing
WALL DETAILS.

PROPOSED.

Scale	Status	Date	Drawn	Checked
1:10 @ A3	PLANNING	11.7.24	dh	

Drawing No. **Revision**

6235-P106

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APPENDIX B

REF:	PRODUCT.	RETAINED.	FIRE RATING.	WEIGHT Gross Density	MAINTENANCE. Required.	LCA RESULTS. (GWP) Construction	EMBODIED CARBON (GWP) kg CO2. PRODUCT STAGE	RECYCLABLE	RECYCLABLE CONTENT.	RECYCLABLE NOTES.	LCA RESULTS. (RRRP) D. kg CO2. (M3)	APPLICATION AND INSTALLATION.	REFERENCED SERVICE LIFE (RSL)	ESTIMATED SERVICE LIFE (ESL)
B1	FACE BRICKWORK	**YES**	....	....	....	....	....	....	....	....	....	....	....	....
B2	HARDIE PLANK	....	A2	11kg/m2 (8mm)	Low	A1 - A3	7.17kg CO2 eq.	Part.	Metal fixings.	Board goes to landfill.	0.00	Fast and simple to install, screw or rivet fix.	50 years.	15 Years
B2	CEDRAL LAP / CLICK	....	A2	11.2kg/m2 (10mm) 12.2kg/m2 (12mm)	Low	A1 - A3	11.43kg CO2 eq.	Part.	95% recycling of screws.	No recycling / reuse of fibre cement boards.	-5.93	Fast and simple to install, screw fix.	60 years.	30 Years
R1, R3	SILICONE RENDER - STO.	....	A2	TBV	High, regular maintenance req.	A1 - A3	8.43kg CO2.	No		Possible but degrades after each use, requires specialist recycling to be properly recycled, but mainly sent to landfill.	-1.84	Preparation, two coat application, curing and finishing 2-7 days.	....	30 years (at least).
P1	ALUMINIUM PANELS	**YES**	....	....	....	....	....	....	....	....	....	....	....	....
P2	WINDOW / DOOR FRAMES.	**YES**	....	....	....	....	....	....	....	....	....	....	....	....
	ROCKWOOL INSULATION.	....	A1	45kg/m3 (25mm)	Low	A1 - A3	1.31kg CO2 eq.	Yes	25% minimum.	ROCKWOOL stone wool insulation and off-cuts can be recycled and transformed into new ROCKWOOL insulation.	-9.93	....	....	50 years +.