

Addendum to JWH-BHE-XX-XX-RP-N-(00)2001

Project Back of Ancoats - Plot C Jersey Wharf
Subject Addendum to JWH-BHE-XX-XX-RP-N-(00)2001 Environmental Standards and Energy Statement
Project no 048355
Date 13 February 2024

Revision	Description	Issued by	Date	Approved (signature)
01	Addendum – For Planning	DF	13/02/2024	MJR

1 Introduction

This design note is to serve as an addendum to the Environmental Standards and Energy Statement and has been prepared by Buro Happold to support the application for section 73 amendments to the Jersey Wharf development.

This addendum considers the impact of the proposed amendments to the development's energy targets and should be read in conjunction with the Environmental Standards and Energy Statement, also prepared by Buro Happold, submitted as previous planning application reference 133769/FO/2022 and amended via non-material amendment ref 136201/NMC/2023.

Policy EN6 sets out a CO₂ reduction target of 15% improvement on Part L 2010, which equates to approximately 9% improvement on Part L1 2013 for dwellings, and 6% improvement on Part L2 2013 for non-dwellings.

The previously submitted scheme was designed to test the impact of the potential Part L 2021 consultation paper and demonstrate the client's commitment to low carbon design. The scheme achieved an overall 23% improvement over Part L 2013; far exceeding the requirements set out in policy EN6.

However, in the period between the planning submission in May 2022 and receipt of tenders in August 2023, macro-economic and inflationary pressures have given rise to a 20% uplift in the cost to deliver Jersey Wharf. This cost increase renders the scheme inviable and has led Manchester Life to consider efficiencies across the scheme which allow it to be delivered whilst maintaining the quality and design intent of the scheme.

Within that exercise, Manchester Life have are proposing a reduction to the 23% improvement on Part L 2013 back to compliance with the EN6 planning requirement.

Our approach to this has been to ensure that the specification enhancements which cannot be retrofitted are maintained. In this way we have retained the principles and objectives of the Sustainability Statement by ensuring the buildings are future proofed in the journey towards Net Zero Carbon. Further to the above, the continuing progress towards the de-carbonisation of the grid, which is not reflected in the compliance modelling, will make a real time contribution to Carbon Reduction within the buildings.

We are proposing to retain the enhanced U-values, glazing specification and air tightness specified in the original planning application with the only change proposed being a reduction to the amount of Photo-Voltaic (PV) panels installed to the roof to the extent it is required to comply with EN6 planning policy.

This approach will see the development achieve the required 15% improvement on Part L 2010 in the immediate term without reducing the building's ability to significantly improve its energy efficiency via the future installation of PV's.

This addendum demonstrates that the development can still meet the EN6 planning requirement of 15% improvement on building regulations Part L 2010 and summarises the revised energy statement. The updated Part L compliance assessment carried out by Ameen is appended to this document.

2 Summary of Proposed Section 73 Amendments

The proposed amendments are summarised as follows:

- A reduction in building footprint, following the removal of the balconies,
- A reduction in building height, following the removal of 2 brick courses per level (excluding ground floor),
- A change in apartment type mix, with the total number of apartments remaining the same.
- The reduction of installed PV area to that required for EN6 compliance, while maintaining the space and infrastructure to facilitate future installation/expansion of the PV array.

3 Assessment

The appointed Mechanical Contractor, Ameen, have conducted the SAP calculations and produced a Part L compliance report based on the proposed amendments summarised in Section 2 of this design note. The fabric and system performance specifications, outlined in Table 3.1 below, have not changed from the previously submitted scheme.

Construction Element	Dwelling	Non-Dwelling
Wall U-Value	0.14 W/m ² K	0.14 W/m ² K*
Floor U-Value	0.1 W/m ² K	0.1 W/m ² K*
Roof U-Value	0.1 W/m ² K	0.1 W/m ² K*
Glazing U-Value (overall)	1.3 W/m ² K	1.3 W/m ² K*
Glazing G-Value	0.53 (0.8 Frame Factor)	0.53 (0.8 Frame Factor)
Air Permeability	2m ³ /(h.m ²) @ 50Pa	2m ³ /(h.m ²) @ 50Pa
Ventilation	MVHR, Low SFP, HR 81%	MVHR, Low SFP, HR 81%
Lighting	100% Low Energy	100% Low Energy
Space Heating	Electric Panel Heaters	Electric Panel Heaters
Water Heating	Immersion hot water cylinder (electric)	Local point of use (electric)
Space Cooling	Natural ventilation supplemented by MVHR (no mechanical cooling)	MVHR and highly efficient VRF Split System where required.

Table 3-1 Proposed Specification Summary

*Note: non-dwelling values are liable to change subject to design development. It will be ensured that the compliance margin required by EN6 will be maintained following any amendment to the design.

The updated SAP assessment was conducted to inform the area of PV required to meet the EN6 planning requirement. The results, included in Appendix A indicate 25,498kWh/year is required to meet the EN6 planning requirement of 15% improvement on building regulations Part L 2010.

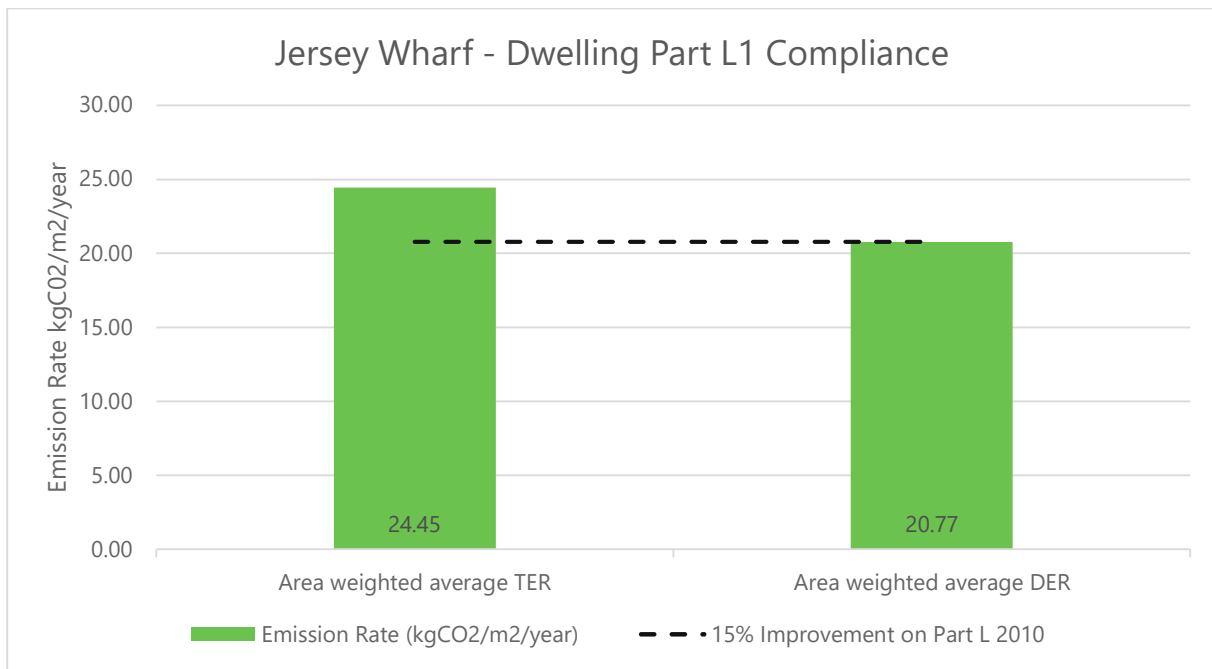


Figure 3-2 Dwelling Part L1 Compliance

The Commercial units have not been affected by the proposed amendments and therefore the design will ensure to achieve the planning target of 15% improvement on Part L2A 2010.

4 Conclusion

This Addendum has considered the revised scheme changes relevant to the Environmental Standards and Energy Statement. The updated Part L compliance assessment carried out by Ameen demonstrates that the development meets the EN6 planning requirement of 15% improvement on building regulations Part L 2010. Furthermore, the development will retain the facility to expand the PV array in future, thus retaining the principles and objectives of the Sustainability Statement and facilitate the journey to net zero carbon.

Appendix A

Ameon SAP2009 Compliance Report.

Block Compliance

Page 1 of 2

Property Reference: JW-001

Issued on Date: 13.Feb.2024

Survey Reference: 001

Prop Type Ref: 1B2P

Property:

SAP Rating: 161 A CO2 Emissions (t/year): -4.19 DER:-79.65 Pass Reduction: 359.4% FEE: 28.7 ZC8: -58.79
 Environmental: 158 A General Requirements Compliance: Fail TER: 30.70 HLP: 0.64 Energy cost: £ -2703

CfSH Results Version: ENE1 Credits: N/A ENE2 Credits: N/A ENE7 Credits: N/A CfSH Level: N/A

Surveyor: admin admin, Tel: unknown

Surveyor ID: admin

Address:

Client:

Software Version: Elmhurst Energy Systems SAP2009 Calculator (Design System) version 4.04r04

SAP version: SAP 2009, Regs Region: England and Wales (Part L1A 2010), Calculation Type: New Dwelling As Designed

SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Block Compliance Report

Property-Survey Reference	Multiplier (M)	Floor Area (F)	DER (D)	TER (T)	F x M	D x F x M	T x F x M
JW-001-001	1	51.3	-79.65	30.70	51.30	-4,086.05	1,574.91
JW-002-001	1	71.4	-8.19	27.57	71.40	-584.77	1,968.50
JW-003-001	1	71.5	21.40	27.56	71.50	1,530.10	1,970.54
JW-004-001	1	51.7	24.05	29.79	51.70	1,243.39	1,540.14
JW-005-001	1	74.7	25.64	28.83	74.70	1,915.31	2,153.60
JW-006-001	1	110.3	22.98	26.00	110.30	2,534.69	2,867.80
JW-007-001	1	82	23.87	28.18	82.00	1,957.34	2,310.76
JW-008-001	1	71.5	28.78	29.40	71.50	2,057.77	2,102.10
JW-009-001	1	71.5	17.74	22.07	71.50	1,268.41	1,578.01
JW-010-001	1	51.9	20.87	25.07	51.90	1,083.15	1,301.13
JW-011-001	1	71.6	17.73	22.06	71.60	1,269.47	1,579.50
JW-012-001	1	71.7	18.95	22.04	71.70	1,358.72	1,580.27
JW-013-001	1	71.5	17.74	22.07	71.50	1,268.41	1,578.01
JW-014-001	1	51.7	25.76	30.59	51.70	1,331.79	1,581.50
JW-015-001	1	51.8	19.88	24.29	51.80	1,029.78	1,258.22
JW-016-001	1	71.7	18.61	22.04	71.70	1,334.34	1,580.27
JW-017-001	1	74.7	22.15	23.26	74.70	1,654.61	1,737.52
JW-018-001	1	51.9	25.71	30.54	51.90	1,334.35	1,585.03
JW-019-001	1	51.5	26.74	33.29	51.50	1,377.11	1,714.44
JW-020-001	1	71.6	27.24	29.38	71.60	1,950.38	2,103.61
JW-021-001	1	51.7	23.86	30.59	51.70	1,233.56	1,581.50
JW-022-001	1	71.7	17.32	22.04	71.70	1,241.84	1,580.27
JW-024-001	4	110.3	19.12	20.37	441.20	8,435.74	8,987.24
JW-023-001	4	82	18.42	22.61	328.00	6,041.76	7,416.08
JW-025-001	4	71.5	17.74	22.07	286.00	5,073.64	6,312.02
JW-026-001	4	71.5	24.20	23.83	286.00	6,921.20	6,815.38
JW-027-001	4	71.6	17.79	22.06	286.40	5,095.06	6,317.98
JW-028-001	4	51.9	20.94	25.07	207.60	4,347.14	5,204.53
JW-029-001	4	71.5	17.74	22.07	286.00	5,073.64	6,312.02
JW-030-001	4	71.7	19.04	22.04	286.80	5,460.67	6,321.07
JW-031-001	4	51.8	19.88	24.29	207.20	4,119.14	5,032.89
JW-032-001	4	51.7	20.99	25.12	206.80	4,340.73	5,194.82
JW-033-001	4	74.7	22.19	23.26	298.80	6,630.37	6,950.09
JW-034-001	4	71.6	19.51	22.06	286.40	5,587.66	6,317.98
JW-035-001	4	51.5	22.06	27.75	206.00	4,544.36	5,716.50
JW-036-001	4	51.9	20.94	25.07	207.60	4,347.14	5,204.53

PASS

Block Compliance

Page 1 of 2

Property Reference: JW-118

Issued on Date: 13.Feb.2024

Survey Reference: 001

Prop Type Ref: 2B4P

Property:

SAP Rating: 144 A CO2 Emissions (t/year): -3.63 DER: -48.80 Pass Reduction: 267.2% FEE: 37.2 ZC8: -29.41
 Environmental: 142 A General Requirements Compliance: Fail TER: 29.18 HLP: 0.90 Energy cost: £ -2308

CfSH Results Version: ENE1 Credits: N/A ENE2 Credits: N/A ENE7 Credits: N/A CfSH Level: N/A

Surveyor: admin admin, Tel: unknown

Surveyor ID: admin

Address:

Client:

Software Version: Elmhurst Energy Systems SAP2009 Calculator (Design System) version 4.04r04

SAP version: SAP 2009, Regs Region: England and Wales (Part L1A 2010), Calculation Type: New Dwelling As Designed

SUMMARY FOR INPUT DATA FOR New Build (As Designed)

Block Compliance Report

Property-Survey Reference	Multiplier (M)	Floor Area (F)	DER (D)	TER (T)	F x M	D x F x M	T x F x M
JW-118-001	1	71.5	-48.80	29.18	71.50	-3,489.20	2,086.37
JW-119-001	1	51.9	8.49	30.52	51.90	440.63	1,583.99
JW-120-001	1	74.6	26.37	28.91	74.60	1,967.20	2,156.69
JW-121-001	1	51.8	23.80	30.55	51.80	1,232.84	1,582.49
JW-122-001	1	71.6	24.36	27.71	71.60	1,744.18	1,984.04
JW-123-001	1	71.8	21.98	27.55	71.80	1,578.16	1,978.09
JW-124-001	1	71.5	24.38	27.72	71.50	1,743.17	1,981.98
JW-125-001	1	71.4	22.03	27.62	71.40	1,572.94	1,972.07
JW-126-001	1	51.5	25.76	30.63	51.50	1,326.64	1,577.45
JW-127-001	1	71.6	26.37	29.16	71.60	1,888.09	2,087.86
JW-128-001	1	71.6	28.54	29.16	71.60	2,043.46	2,087.86
JW-129-001	4	71.5	21.16	23.71	286.00	6,051.76	6,781.06
JW-131-001	4	51.9	19.78	25.06	207.60	4,106.33	5,202.46
JW-130-001	4	74.6	20.95	23.39	298.40	6,251.48	6,979.58
JW-132-001	4	71.6	19.69	22.24	286.40	5,639.22	6,369.54
JW-133-001	4	51.8	19.80	25.09	207.20	4,102.56	5,198.65
JW-134-001	4	71.5	19.71	22.26	286.00	5,637.06	6,366.36
JW-135-001	4	71.8	18.03	22.08	287.20	5,178.22	6,341.38
JW-136-001	4	51.5	21.04	25.17	206.00	4,334.24	5,185.02
JW-137-001	4	71.4	18.09	22.14	285.60	5,166.50	6,323.18
JW-138-001	4	71.5	24.08	23.71	286.00	6,886.88	6,781.06
JW-139-001	4	71.5	22.17	23.71	286.00	6,340.62	6,781.06
JW-173-001	1	71.5	24.29	25.02	71.50	1,736.74	1,788.93
JW-174-001	1	74.6	25.36	24.66	74.60	1,891.86	1,839.64
JW-175-001	1	51.9	21.57	25.91	51.90	1,119.48	1,344.73
JW-176-001	1	71.6	22.09	23.15	71.60	1,581.64	1,657.54
JW-177-001	1	51.8	21.60	25.94	51.80	1,118.88	1,343.69
JW-178-001	1	71.6	22.09	23.15	71.60	1,581.64	1,657.54
JW-179-001	1	71.8	19.92	22.95	71.80	1,430.26	1,647.81
JW-180-001	1	51.5	23.22	25.95	51.50	1,195.83	1,336.43
JW-181-001	1	71.4	19.99	23.04	71.40	1,427.29	1,645.06
JW-182-001	1	71.6	27.56	24.95	71.60	1,973.30	1,786.42
JW-183-001	1	71.6	25.44	24.95	71.60	1,821.50	1,786.42
JW-184-001	1	72.1	31.38	29.41	72.10	2,262.50	2,120.46
JW-185-001	1	71.7	25.54	27.02	71.70	1,831.22	1,937.33
JW-186-001	1	98.9	27.53	25.57	98.90	2,722.72	2,528.87

PASS