Technical Note

Project Name: Brunswick St

Design Phase: Construction
Revisions: 01

Date: 15th October 2020

DESIGN SUMMARY - PART L1A 2013 COMPLIANCE MODEL SPECIFICATION

This technical note has been produced to provide a summary of Compliance Specification information for the production of a sample number of 'As Designed' SAP calculations for Brunswick St.

The technical note covers, % improvements over Part L, U-values, air permeability, services strategy and renewable technology requirements.

The purpose of the note is to address Manchester City Councils Core Strategy document in particular Policies EN4 and EN6.

The scheme design will follow the Energy Hierarchy approach by prioritising fabric efficiency measures prior to the installation of renewable energy technologies to enable the maximum viable reductions in CO2 emissions over the Part L 2013 baselines. The overriding objective in the formulation of the strategy is to maximise the reduction in CO_2 emissions through the application of this Hierarchy with a cost-effective and technically appropriate approach that provides maximum benefits in terms of energy costs.

The baseline energy emissions have been developed, producing preliminary SAP calculations. Passive fabric measures across the building including improvements to the thermal performance and air tightness above Part L requirements of the Building Regulations have been incorporated.

Manchester City Council Core Strategy document Policy EN6 references the domestic CO2 emissions reduction targets of a minimum of 15% increase on Part L 2010.

Part L changed on 6th April 2014, with Part L 2013 superseding Part L 2010. The Part L 2013 specifications were strengthened to deliver 6 per cent carbon savings across new homes relative to Part L 2010.. This effectively means there is a 6% uplift in the Target Emissions Rating (TER) on 2010 levels.

The below specifications and summary of the sample calculations show a 9% improvement over Part L 2013, therefore based on the strengthening of carbon savings from Part L 2010 to Part L 2013, these calculations comply with the 15% improvement requirements over Part L 2010 referenced within Policy EN6 of the Manchester City Council Core Strategy document.

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PART L1A 2013 Compliance Model Specification

Average TER		**19.24**
Average DER		**17.44**
% Improvement Over Part L		**9.36**
Air Tightness		**5**
U- values	Wall	**0.18**
	Roof	**0.15**
	Floor	**0.13**
	Window U-value	**1.3**
	Thermal Bridging	**Accredited construction details implemented**
Ventilation		**MVHR**
Lighting		**100% LEL Fittings**
Heating System		**Electric Panel Heaters**
Control		**Time and Temp appliance control**
DHW		**Hot water fed from community heating scheme**
Renewable Technology Detail		**0.81 kwp per dwelling / 30 deg tilt / facIng SW**
		Total P.V. – 36.45kwp

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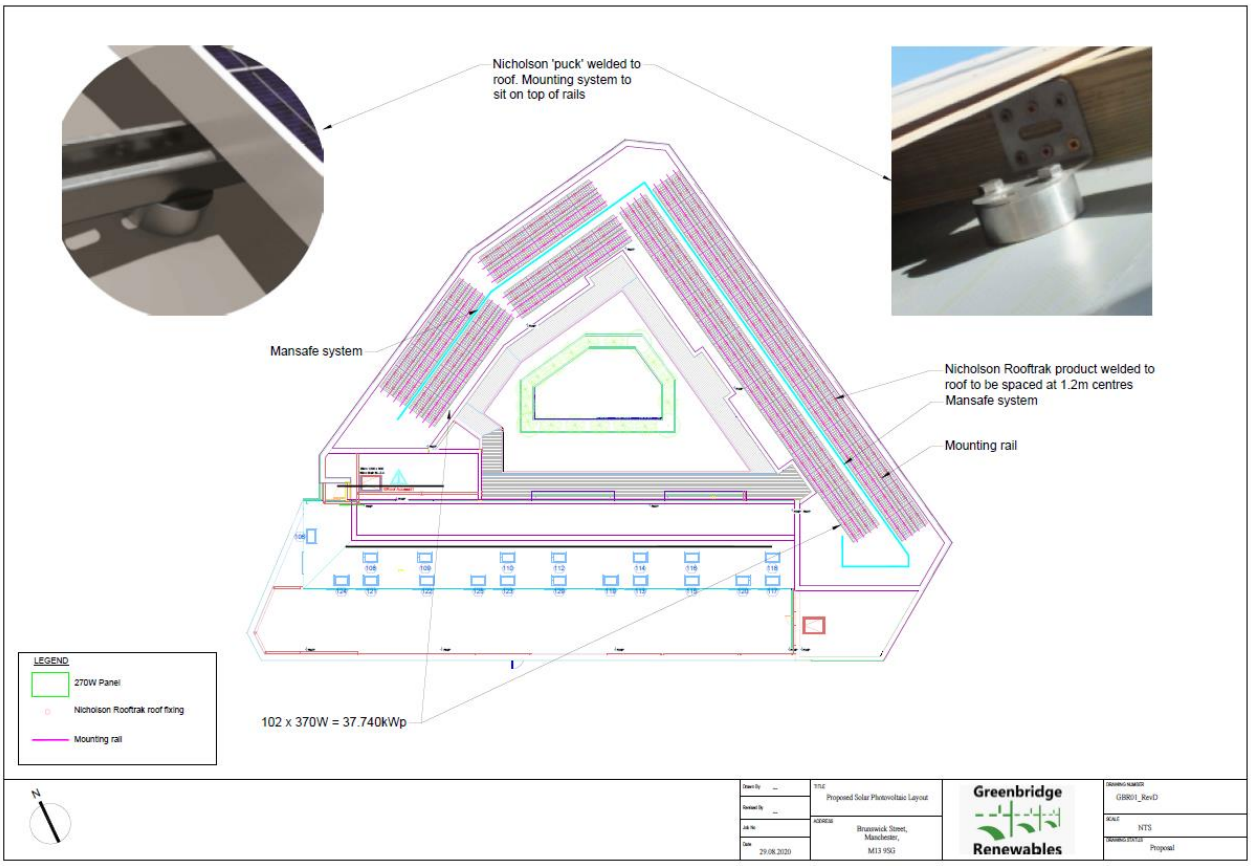

Block Compliance WorkSheet: Brunswick

User Details

Assessor Name: **Stroma Number:**
Software Name: Stroma FSAP **Software Version:** Version: 1.0.4.10

Calculation Details

Dwelling	DER	TER	DFEE	TFEE	TFA
101	20.53	21.09	48.5	62.8	66.71
105	20.78	19.75	48.7	56.7	65.78
202	12.12	17.55	32.7	35.7	48.81
206	12.59	15.66	31.9	32.2	59.23
310	16.85	18.11	41.3	44.9	57.2
406	12.98	15.85	32.7	33.2	59.23
503	24.54	25.43	60.2	76.2	46.29
506	19	21.17	47.6	61.2	59.23

Calculation Summary

Total Floor Area	462.48
Average TER	19.24
Average DER	17.44
Average DFEE	42.88
Average TFEE	50.28
Compliance	Pass
% Improvement DER|TER	9.36
% Improvement DFEE|TFEE	14.72

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