



# RE:Willingham Terrace, London NW5 2UY

## Solar PV Specification

Size of System: 9.805kW

Orientation of PV System: South

Estimated Output Annually: 8,118.54kW hours

CO2 Reductions per Annum: 4,5611.33kg

## Plant Materials

Panel: 37 x Solar World 265W Mono (See attached data sheet)

Inverter: SMA Tri-power 8000TL-20 (Supplied by 3 phase supply)

Dimensions W x H x D mm = 665 x 690 x 265 (See attached data sheet)

The Inverter will be located at the top of the riser. The riser shall be the one that houses the 3 phase Landlords Meter and Distribution board.

TP/N Isolation switch and 3 x DC Isolation switches to be located adjacent to Inverter.

Generation Meter: Elster A1100 (3 Phase). The Generation Meter will be located next to the Distribution Board in Riser. (See attached data sheet)

A TP/N 6mm SWA will be run on cable tray up to the Inverter Position on the Top Floor.

TP/N Isolation switch to be located next to the Generation Meter.

Solar PV 6mm DC Cables to be run through from Riser to Roof via ducting supplied by builder.

DC Cables to be housed on Cable Tray in Riser and on Roof.

3 x Strings to be wired to the Inverter (see attached Layout)



Roof Mounting: Solar Flat System (for flat roofs with reduced load bearing capacity)

The angle of the array would be 0 degrees.

Weight of Arrays:

Panels and Rail:  $37 \times 20.0\text{kg} = 740.0\text{kg}$

Ballast:  $72 \times 25.0\text{kg} = 1,800.00\text{kg}$

Total Weight: 2,540.00kg

Weight on the roof (modules + system + ballast) = 15.11kg/m<sup>2</sup>

Weights to be confirmed once Layout has been accepted.

**Panels and Ballast to be lifted on to Roof by Crane. Site Foreman to liaise with Jon Copeland to decide when best to load panels. (Preferably just before crane to come down)**

## Overview of Installation

- Set out Flat Ballast System with guidance from Fischer on amount of Ballast required.
- Wire DC cabling from array frame to rising main via Service Riser. Cable Tray to fix DC cable on roof and in Rising Main Cupboard.
- Inverter to be mounted in riser. Riser to be that of 3 phase landlords meter. AC Isolation switches and DC Isolation switch installed adjacent to inverter. AC Isolator to be 3 phase 20A/phase rated.
- System wired through suitable switch gear and incorporating Elster A1100 Generation meter to record accumulative generation.
- Panels to be fitted to Frame Work, all DC Cables zip tied.
- System Tested, Commissioned and Certified to MCS Requirement.
- Paper Work and Handover Pack issued to client.