



Solar Voltaics
Bramley Barn, Main Rd
Chichester, West Sussex, PO18 8XA
United Kingdom

Marlow Watson Fluid Technology Solutions

Dyson Wood Way, Bradley Business Park,
Huddersfield HD2 1GZ, United Kingdom

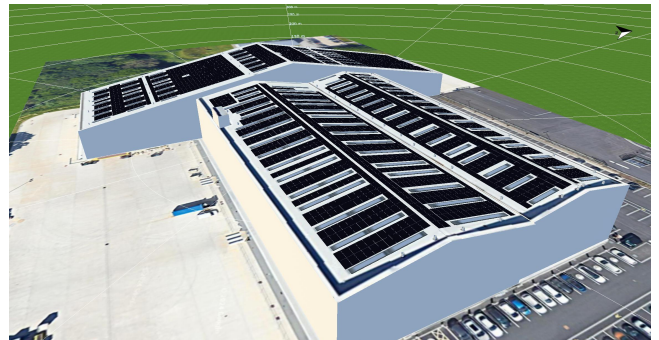
Project Name: Marlow Watson Fluid Technology Solutions -
Aflex House

20/03/2024

Your PV system from Solar Voltaics

Address of Installation

Dyson Wood Way, Bradley Business Park, Huddersfield
HD2 1GZ, United Kingdom



Project Overview

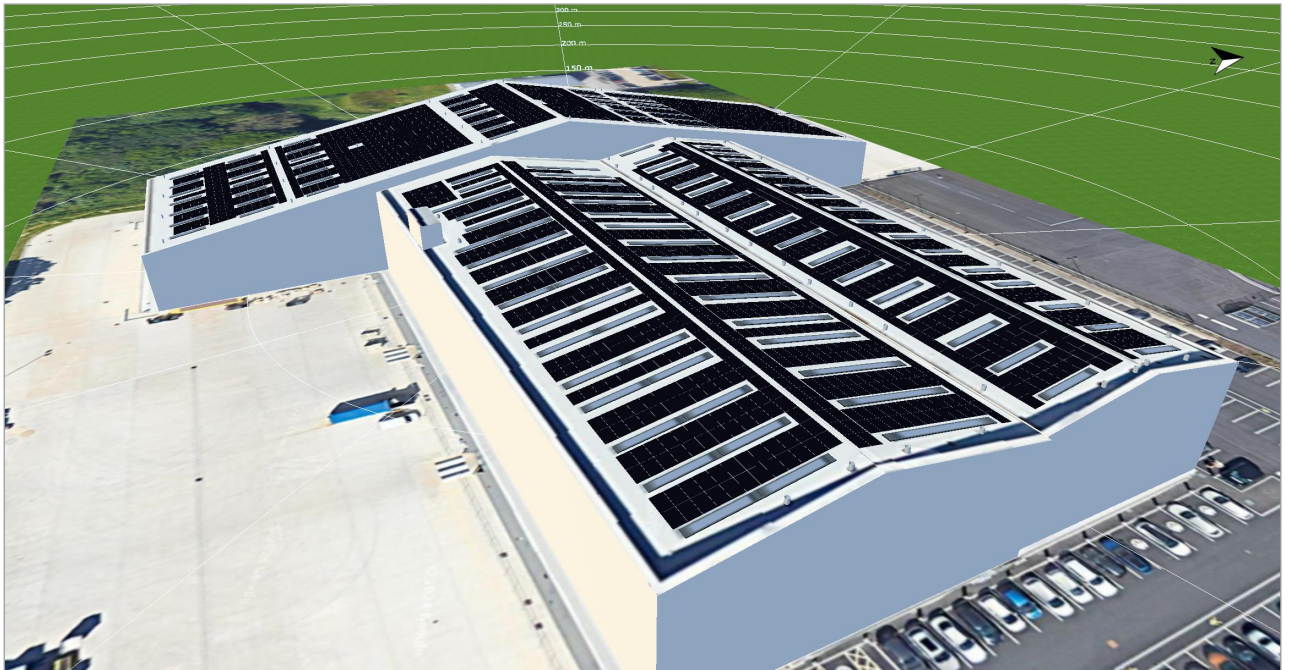


Figure: Overview Image, 3D Design

PV System

3D, Grid-connected PV System with Electrical Appliances

Climate Data	Huddersfield, GBR (2001 - 2020)
Values source	Meteonorm 8.2(i)
PV Generator Output	1148.84 kWp
PV Generator Surface	5,098.6 m ²
Number of PV Modules	2611
Number of Inverters	11

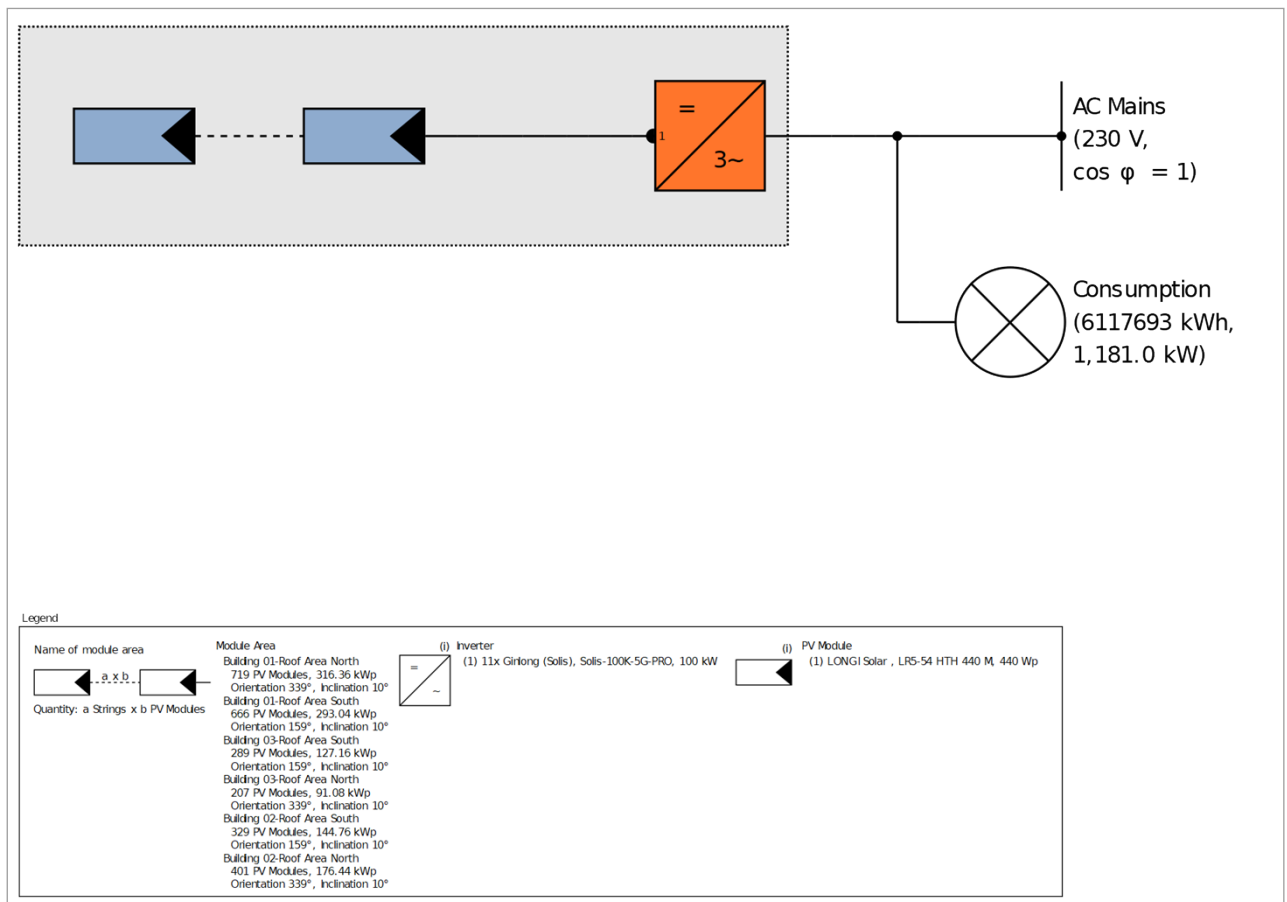


Figure: Schematic diagram

Production Forecast

Production Forecast

PV Generator Output	1,148.84 kWp
Spec. Annual Yield	923.92 kWh/kWp
Performance Ratio (PR)	93.62 %
Yield Reduction due to Shading	0.7 %
PV Generator Energy (AC grid)	1,061,526 kWh/Year
Own Consumption	1,036,820 kWh/Year
Clipping at Feed-in Point	0 kWh/Year
Grid Export	24,706 kWh/Year
Own Power Consumption	97.7 %
CO ₂ Emissions avoided	498,877 kg / year
Level of Self-sufficiency	16.9 %

The results have been calculated with a mathematical model calculation from Valentin Software GmbH (PV*SOL algorithms). The actual yields from the solar power system may differ as a result of weather variations, the efficiency of the modules and inverter, and other factors.

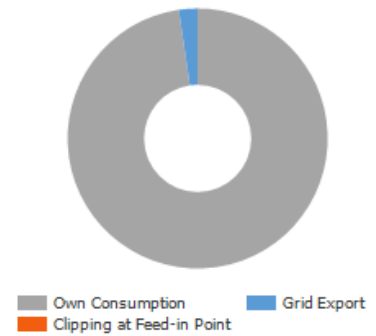
Simulation Results

Results Total System

PV System

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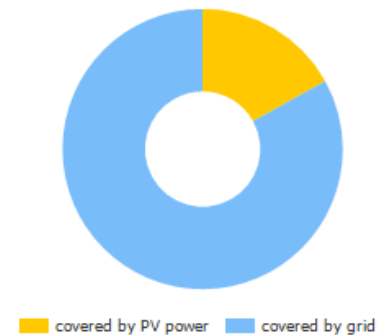
PV Generator Energy (AC grid)



Appliances

Appliances	6,117,693 kWh/Year
Standby Consumption (Inverter)	85 kWh/Year
Total Consumption	6,117,778 kWh/Year
covered by PV power	1,036,820 kWh/Year
covered by grid	5,080,958 kWh/Year
Solar Fraction	16.9 %

Total Consumption

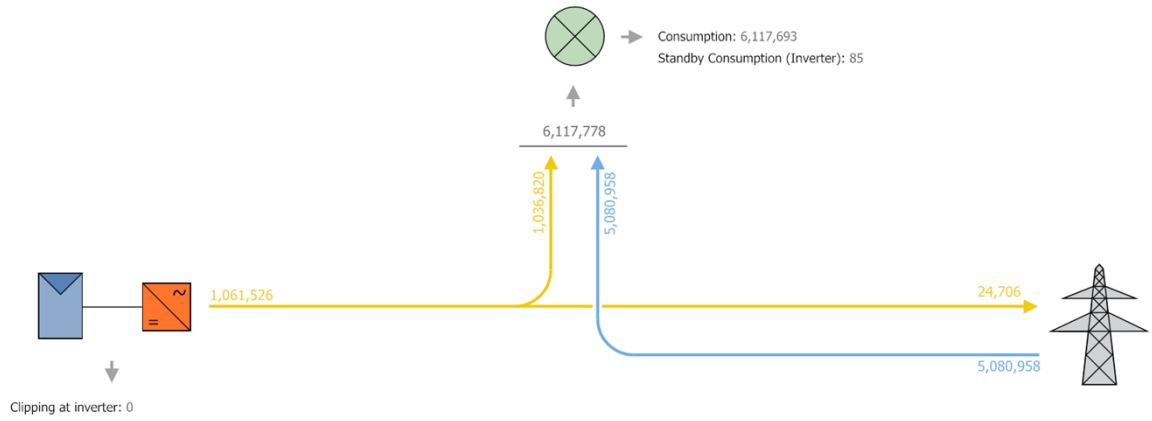


Level of Self-sufficiency

Total Consumption	6,117,778 kWh/Year
covered by grid	5,080,958 kWh/Year
Level of Self-sufficiency	16.9 %

Energy Flow Graph

Project: Marlow Watson Fluid Technology Solutions - Aflex House



All values in kWh
Small deviations in the totals can occur due to rounding
created with PV*SOL.

Figure: Energy flow

Solar Voltaics

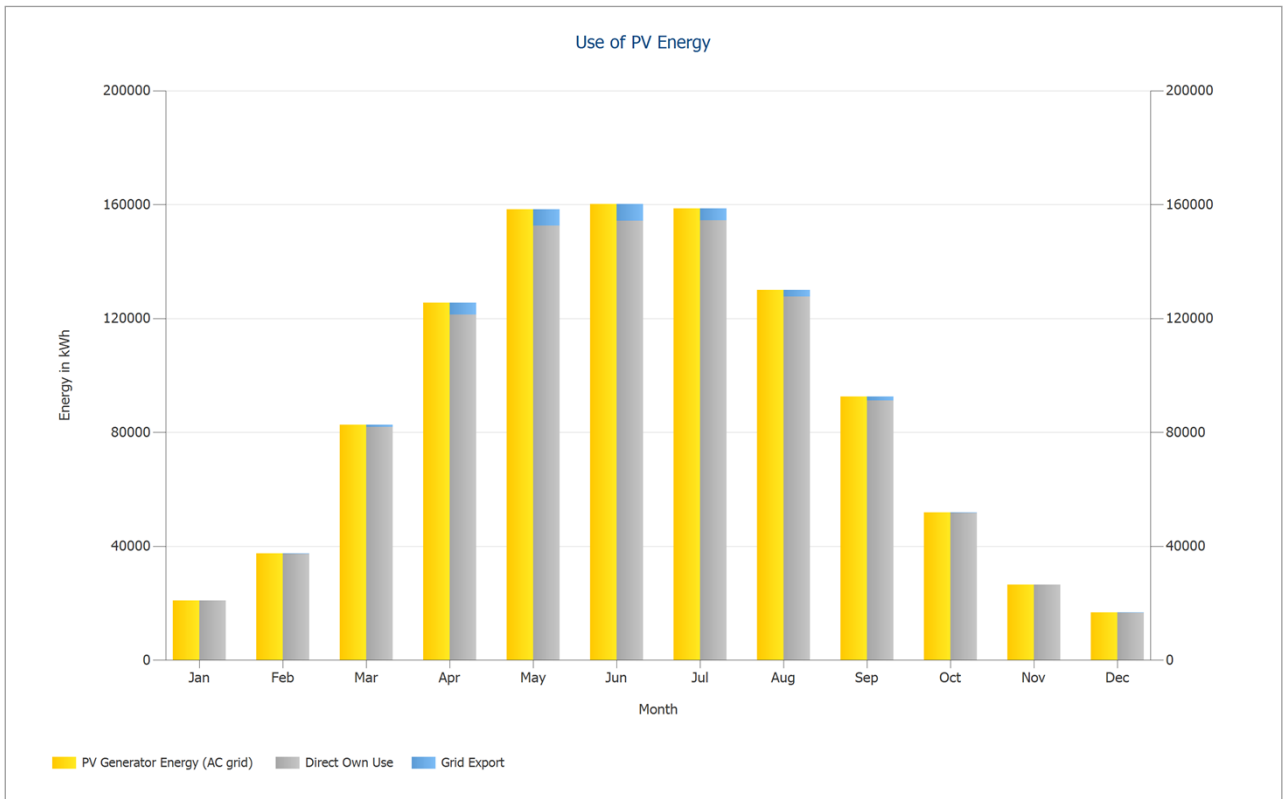


Figure: Use of PV Energy

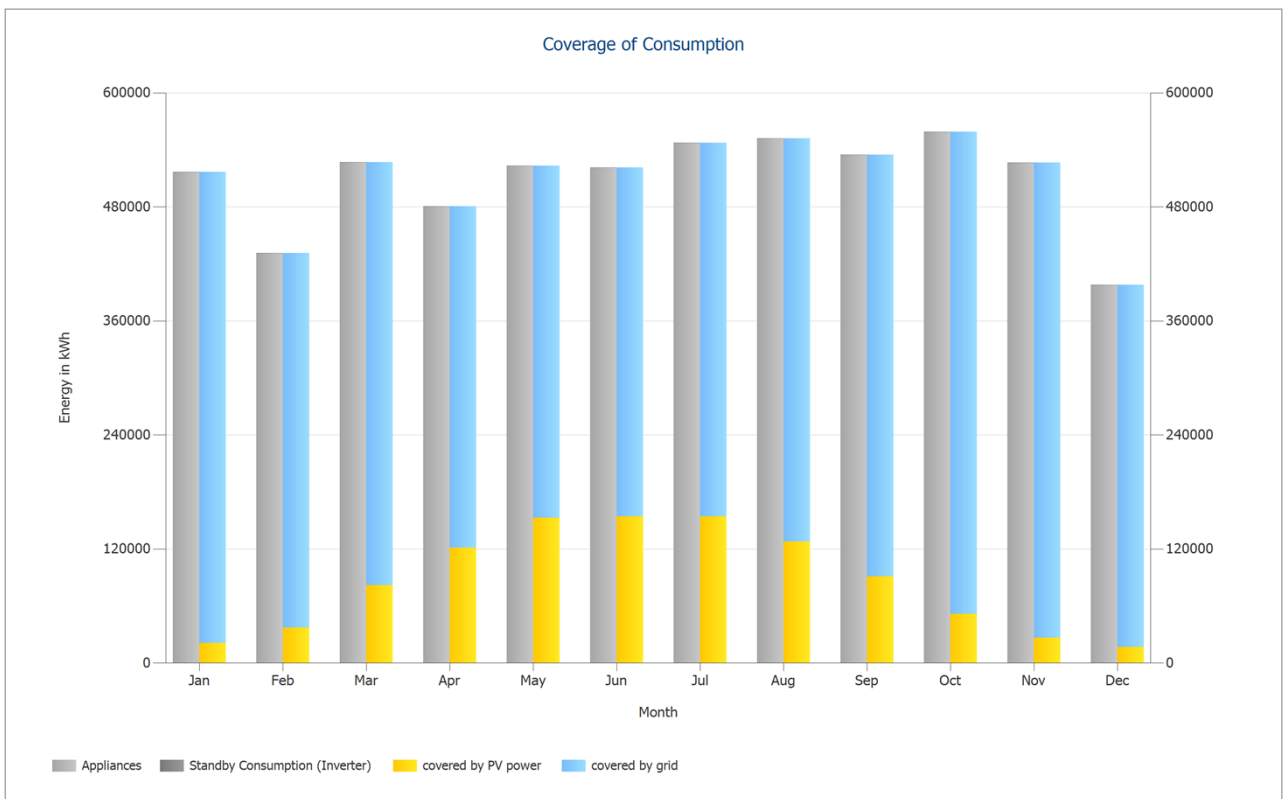


Figure: Coverage of Consumption

Screenshots, 3D Design Environment

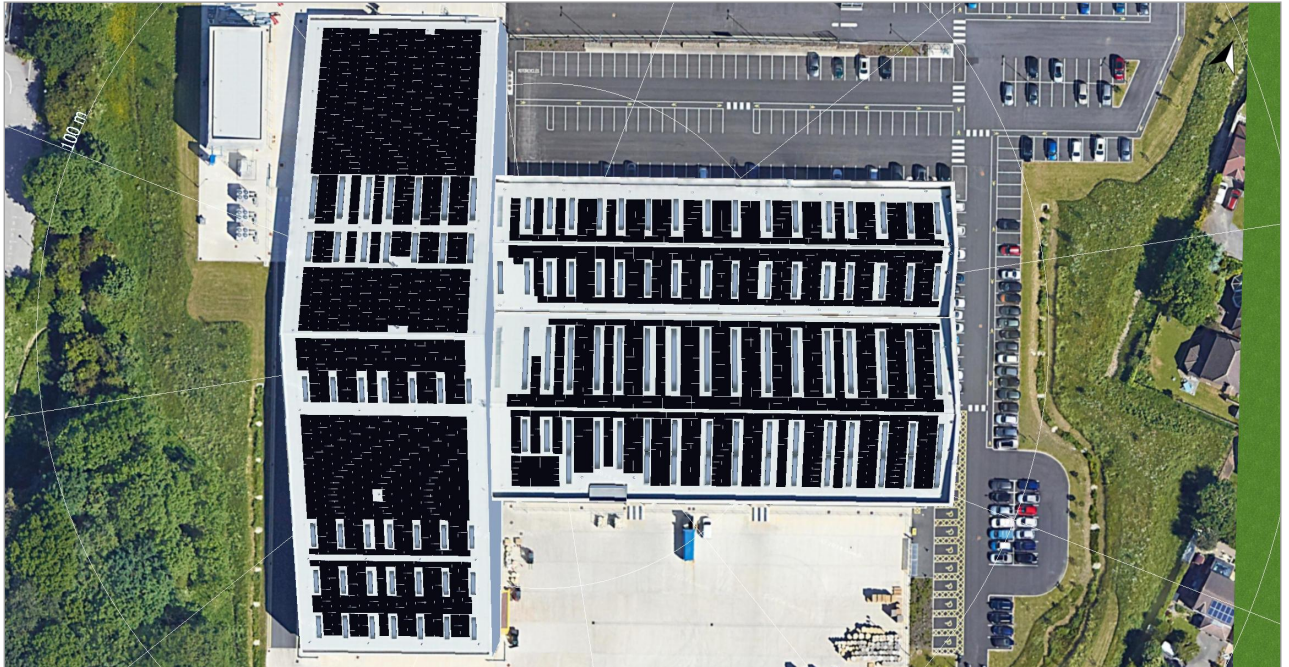


Figure: Overhead View

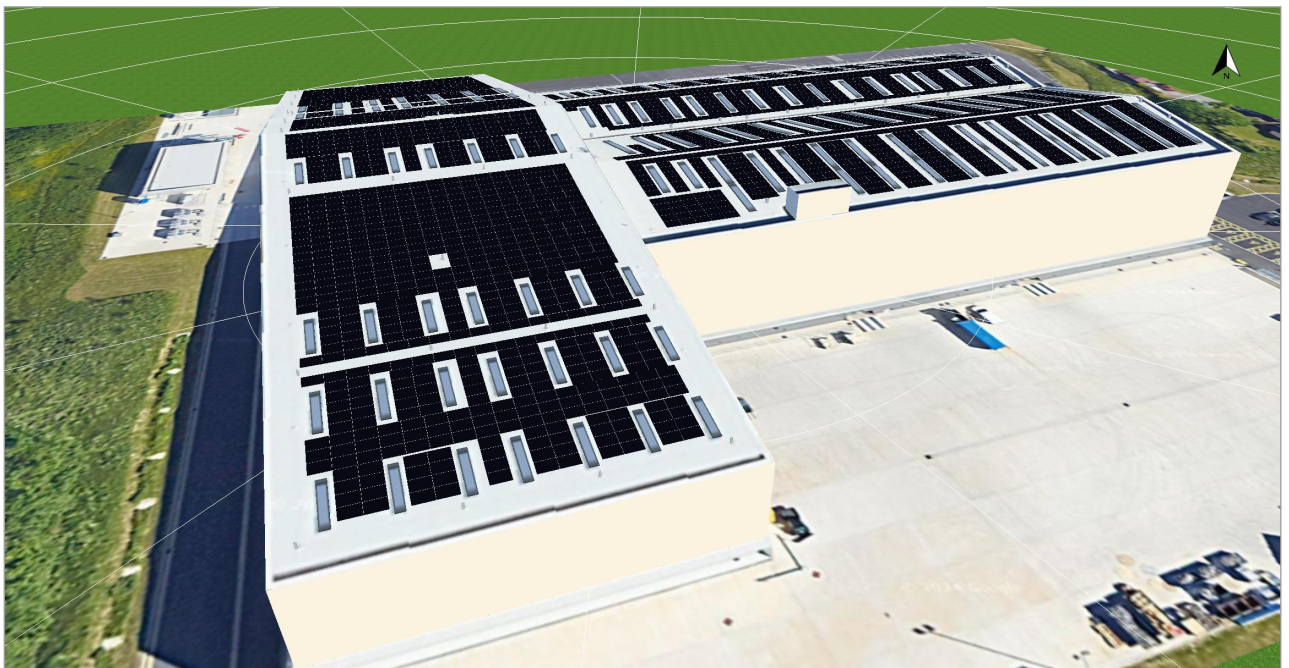


Figure: East View

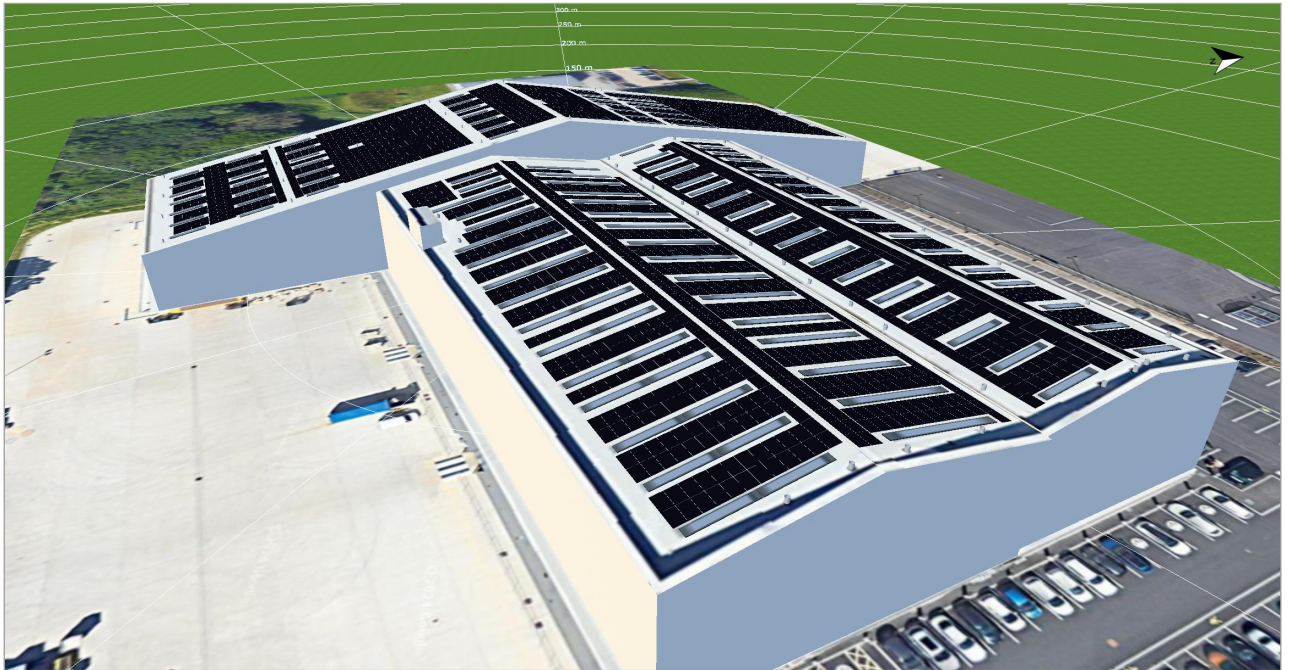


Figure: South View

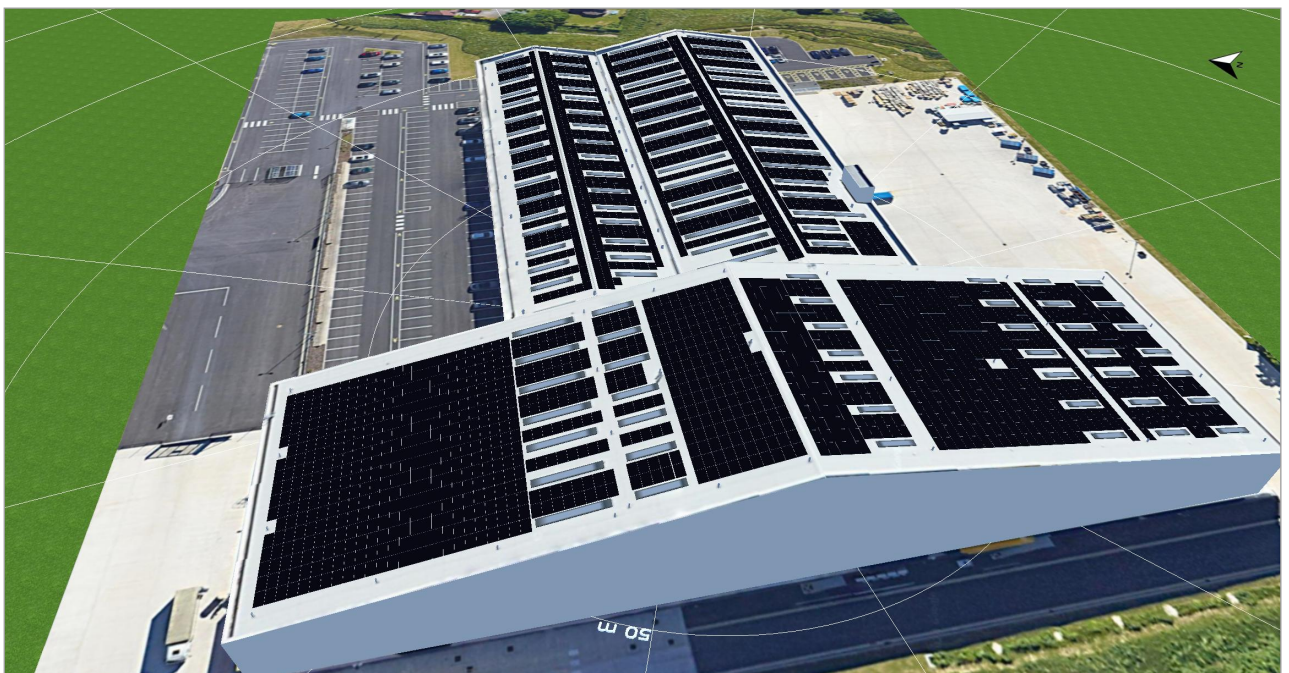


Figure: West View

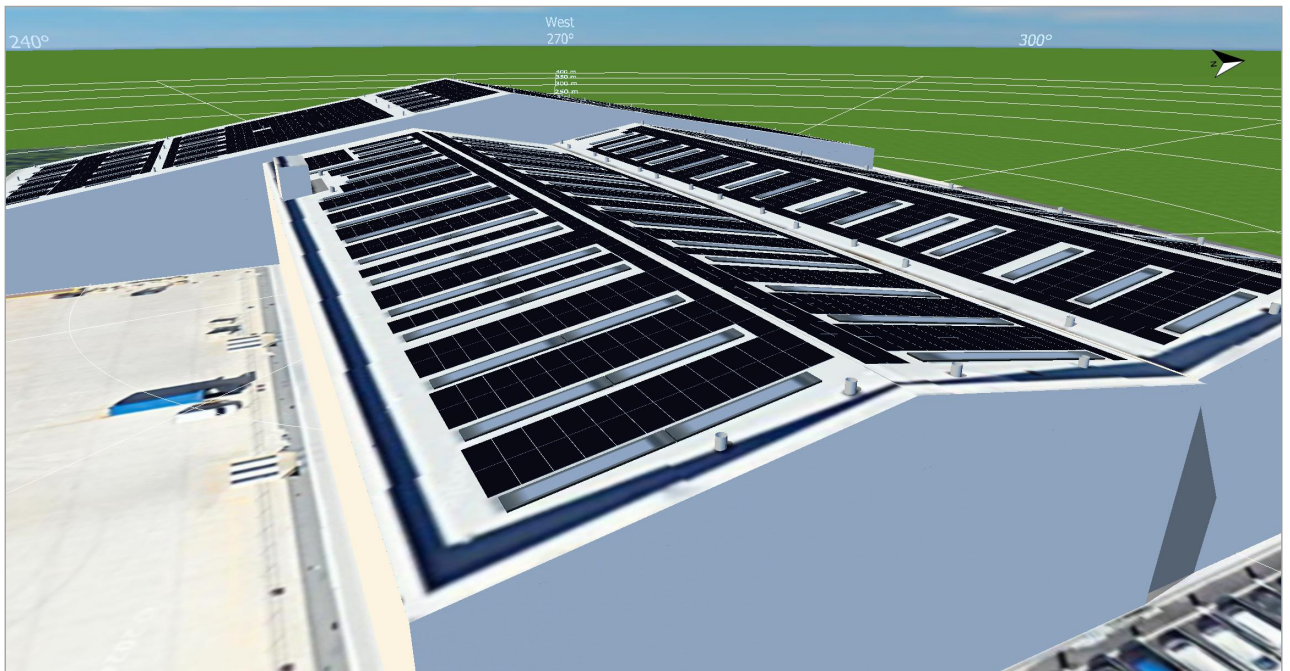


Figure: East Detail

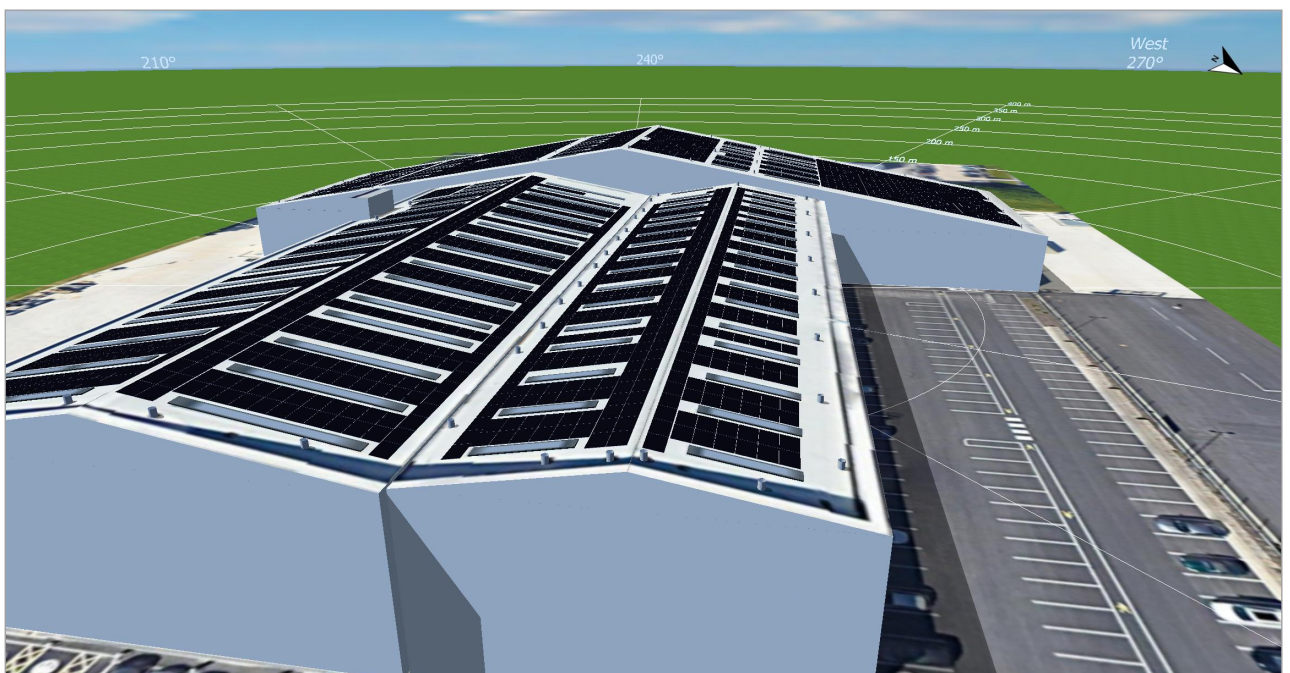


Figure: West View 2

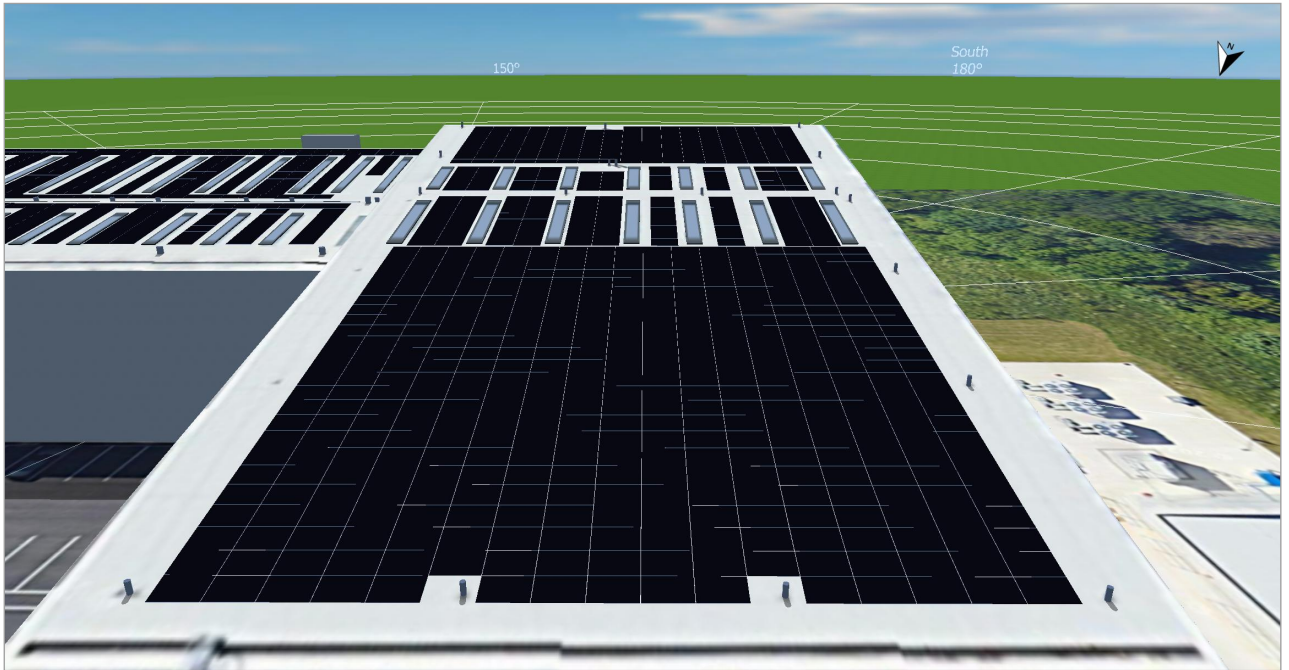


Figure: Roof 1 Detail North

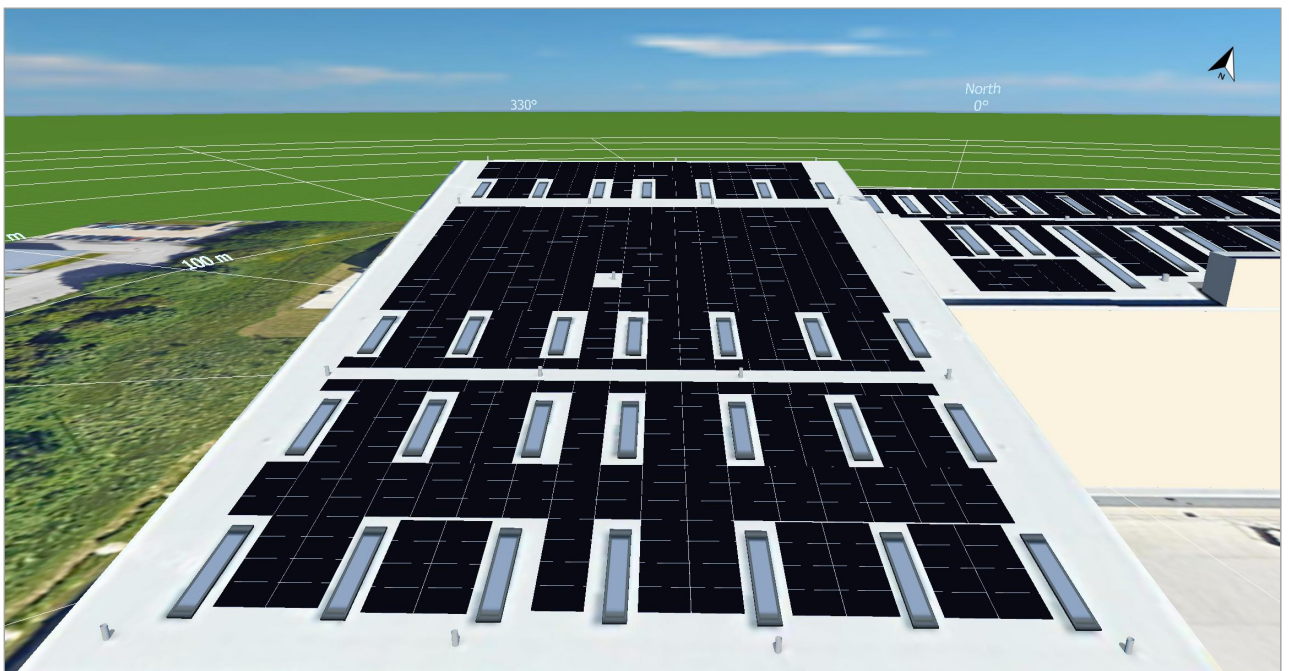


Figure: Roof 1 Detail South

Shading

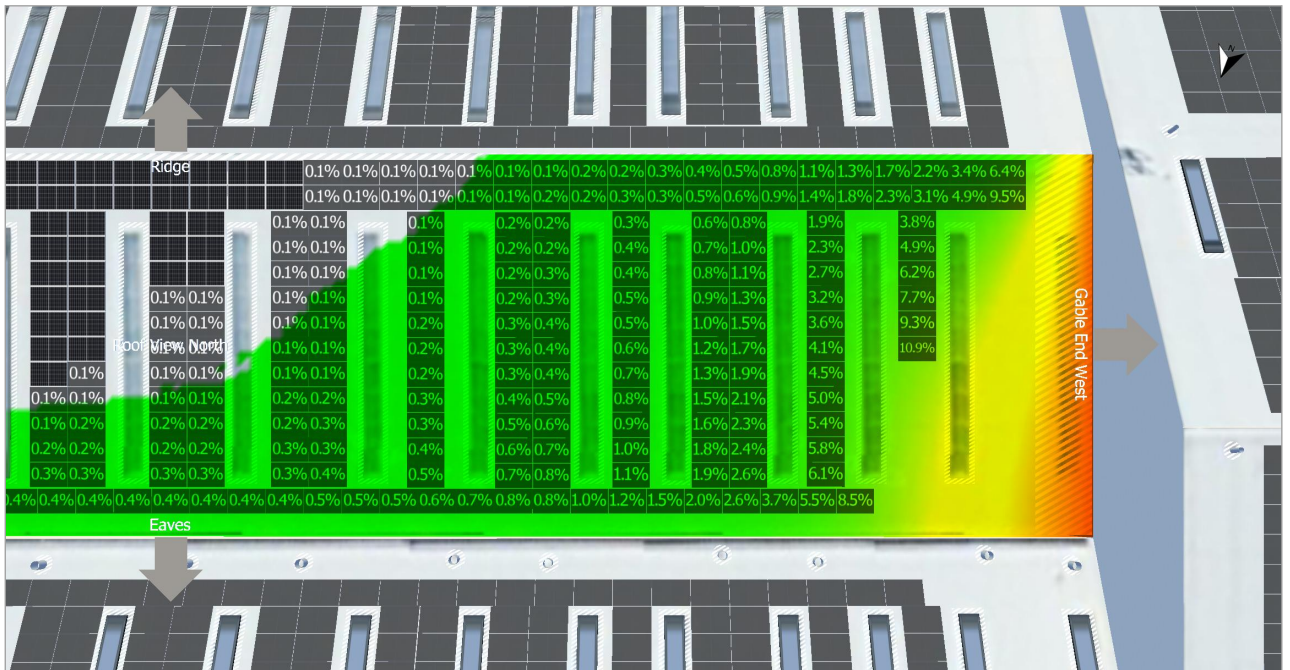


Figure: Shade Illustration A

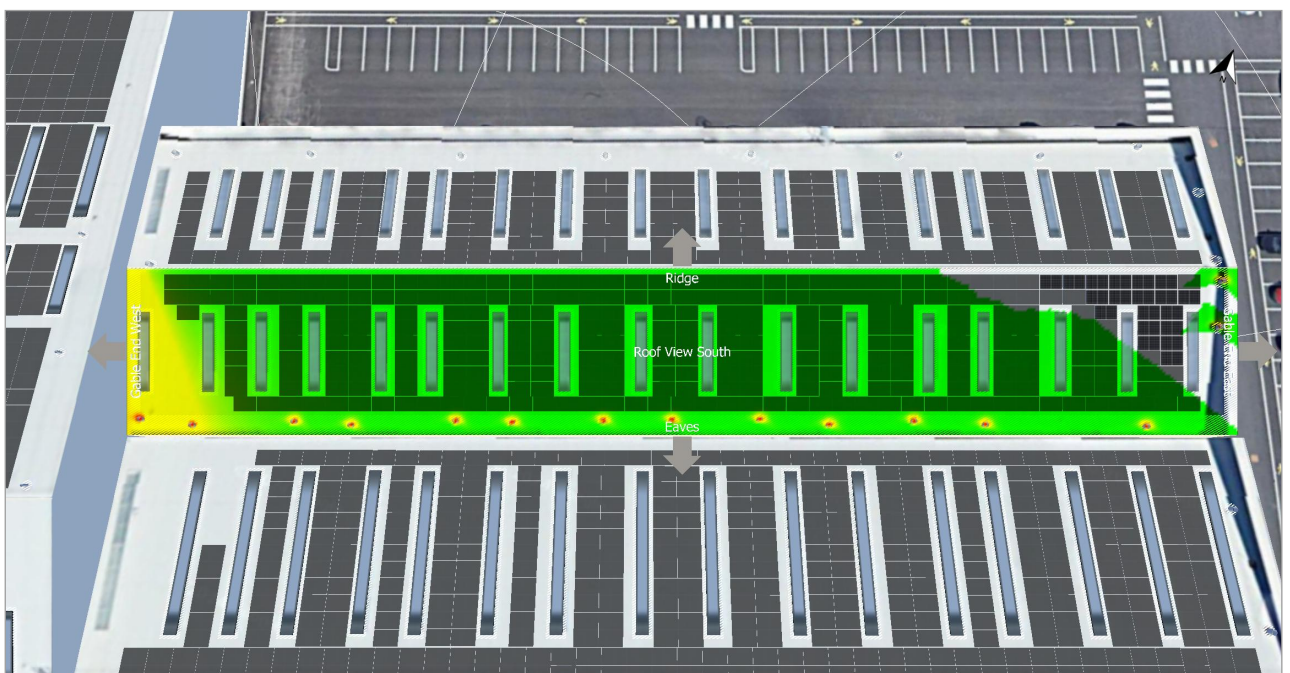


Figure: Shade Illustration B