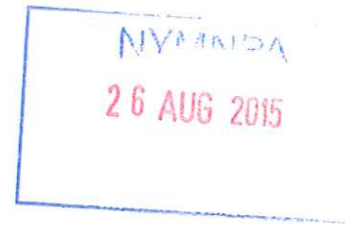


Design & Access Statement for The Orange Tree



Introduction

This is an application for a new sewage treatment plant, new windows, new replacement slates to roof (including solar panels) and a Greenhouse to the land at the rear at The Orange Tree, Rosedale East, Near Pickering, N.Yorks. YO18 8RH.

The applicant is Mr. Edward J. Harpin.

Existing Site

The Orange Tree currently provides B&B type accommodation midweek with full board relaxation breaks at weekends. The Orange Tree is built in rendered brick with a slate roof. The property is accessed from Daleside Road. It is situated in the North Yorkshire Moors National Park, 2 miles from the village of Rosedale Abbey.

There is a car park to the rear of the property.

The applicant has been the owner of the property since January 2011.

Proposal

The current septic tank system is to be replaced with a much more environmentally friendly sewage treatment plant.

The proposed new windows are to replace the current single glazed timber windows that are too badly rotten to repair to a satisfactory level.

New roof including solar PV panels.

New Greenhouse

Access

Access is from Daleside road into a car park to the rear. There is a front door at road level for disabled access.

26 AUG 2015

Design & Materials

The sewage treatment system will be a WPL Diamond DMC (21 to 55 people) it has an underground tank with only the access manholes visible. This will drain to an existing land drain.

The proposed new windows will be double glazed with frames made of powder coated aluminium in a similar style to the existing, including the same transom pattern. They will be in a grey colour. The reason for choosing aluminium is due to its environmental credentials (as opposed to upvc). Due to the Orange Tree's exposed position the windows have to withstand severe weather conditions, these windows have been designed for that purpose.

The Greenhouse will be "Victorian style" with brick base and with a glazed steel frame.

Planning.

The proposed new windows will increase the insulation to the property and greatly reduce maintenance work.

The sewage treatment plant will provide a more environmentally friendly and efficient solution to the sewage treatment.

We would very much like for the Orange Tree to become an example of an environmentally friendly and sustainable business within the North York Moors National Park. The Greenhouse will enable us to grow more of our own produce for our vegetarian menus and also provide a resource for land based courses that we would like to run here (permaculture and biodynamics).

Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module

£146.30

Weight:
19.00 KGS

Availability:

For Pricing Call us on 0203 287 8263 or Email us at info@renewgen.co.uk

Shipping:

Calculated at checkout

Quantity:

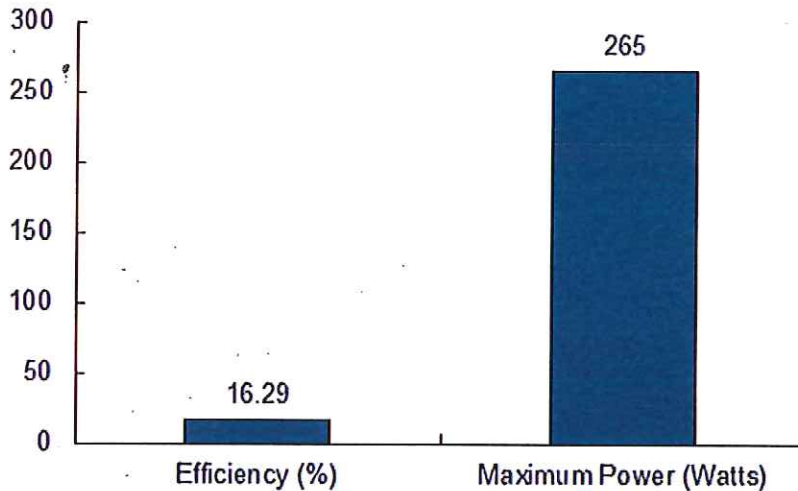
[Share on email](#) [Share on print](#)

Product Description

Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module – this is an independent review for Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module we have compiled for your reference. Feel free to add your comments or experiences at the bottom of the page.

Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module power output and efficiency

The graph below shows the typical power produced (in Watts) for the Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module at maximum available sunlight (irradiance). The Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module has a maximum output of 265 Watt. The graph below also shows the efficiency of Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module. Efficiency is an important thing to look at when comparing solar panels, since it affects how much power can be captured from the sun. The Seraphim SRP-265-6MB All Black 265 Watt Solar Panel Module has a module efficiency of 16.29%.



Compare power curve with other solar panels

TECHNICAL SPECIFICATIONS

GENERAL

Manufacturer	Seraphim	
Model	SRP-265-6MB	
Material	Monocrystalline	
Rated Power/Nominal Output	265	Wp
Module Efficiency	16.29	%

MECHANICAL DATA

Cell size	1.56 x 1.56	cm ²
Number of cells and connections	60	
Length:	164.00	cm
Width:	99.20	cm
Depth:	4.00	cm
Weight:	19.00	kg
Maximum mechanical load		kN/m ²
Front glass	3.2 mm tempered glass, low iron	
Frame	Anodized/ Electrophoretic aluminum alloy	
Junction box	IP65/IP67	
Cable	0.4 cm ² , symmetrical lengths 90cm	cm
Connector Type:	MC4 Compatible	
Pallet Size:		



ELECTRICAL DATA (AT STC)		
Maximum power Pmax	265	Wp
Open circuit voltage Voc:	37.68	V
Short circuit current Isc	9.13	A
Maximum power point voltage Vmpp:	31.68	V
Maximum power point current Impp:	8.36	A
Module Efficiency	16.29	%

ELECTRICAL DATA (AT NOCT)		
Maximum power Pmax		Wp
Open circuit voltage Voc:		V
Short circuit current Isc		A
Voltage at point of maximum power Vmpp		V

Nominal Operating Cell Temperature NOCT	45±2 °	C
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LIMIT VALUES

Maximum System Voltage	1000	V DC (IEC)
Over-current protection		A
Temperature range	-40°C ~ +85°C	C

TEMPERATURE COEFFICIENT

Pmax	-0.43 %/°C	% / C
Voc	-0.35 %/°C	% / C
Isc	+0.04 %/°C	% / C

SUPPORT

MCS certificate	Yes
Guarantee/Warranty	10 years guarantee on product material 12 years guarantee on 90% minimum output 25 years guarantee on 80% minimum output

CERTIFICATES AND APPROVALS

Certificate ISO 14001
 Certificate ISO 18001
 Certificate ISO 9001

Manufacturer Country

China

Year of product launch

2012