

13. GUIDELINES FOR SOLAR ENERGY PANELS & SOLAR THERMAL COLLECTORS

The Dulwich Estate supports residents who wish to reduce their carbon footprint by better insulating their homes or installing domestic renewable energy sources such as solar panels.

Most installations require prior approval from the Estate.



Integrated solar tiles



In-line solar panels

The design of a solar panel installation varies widely and there are a number of products now available for use in heritage settings which help to balance the visual impact. To ensure that the design is as in keeping as possible, consideration should be given to the size, layout, projection from the roof, the material and support framework.

If in doubt whether prior approval is required, please contact us.

When submitting your application for solar panels, the following guidance applies.

- Solar panels are permitted to the rear roofs of properties, to flat sections of a main roof and side roofs subject to the detail, however they should not be conspicuous when viewed from the road or other public spaces, such as parks and shared amenity spaces.
- Solar panels on the front roof of a property or a side roof directly facing the main road are not permitted. Instead, consider installing them on flat roofs, rear extensions, behind parapets and on garden buildings.
- An installation to a side roof of a mid-row property would be permitted but the panels should be set back from the front elevation to reduce the visual impact.
- The installation should not visually dominate the roof. To ensure this, on a pitched roof the edge of the panels should be positioned no less than 0.6m from the edges of the roof plane including the eaves. The highest point should be no closer than 0.3m from the ridge. The installation should not project from the wall or roof slope by more than 0.2m.

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- The layout should be regular in appearance and should not appear overly crowded. If you have existing dormers and rooflights allow sufficient spacing so that the installation does not appear crammed on.
 - The colour of the solar panel, its reflectance and finish should be appropriate to the original roofing material. Supporting frames are available in anodised black or silver finish, the black finish is the least visually obtrusive and is recommended. Cut frame ends should be painted black or capped off.
 - Where panels will cover a significant area of the roof consideration should be given to roof-integrated photovoltaic (PV) panels. This involves removing the original slate or clay tiles and creating a very low-profile array with a flashing detail to integrate them into the roof covering. Integrated or in-line solar panels are less visually intrusive than those mounted on rails, they can also be more durable as the whole roof is replaced and warrantied.
 - When installed on a flat roof solar panels are fixed to a frame that tilts them to the optimum solar angle. The height of the panels will vary depending on the orientation and location. Details of the overall height of solar panel installations will be required with detailed sections showing the relation to parapet walls and roof edges. Generally, flat roofs are a good location for solar panels if they are set back and screened by parapet walls. 3D drawings may be required to demonstrate how visible the installation will be.
 - A ground mounted array is an alternative location. It is important to ensure that the panels are not in the shade and ensure that any cable runs for the installation do not damage tree roots.
 - Solar slates have been developed to have a similar appearance to natural slates, however the difference in texture and colour is detectable and has a visual impact. The life expectancy of solar slates is shorter than natural slates, and they are not as efficient as solar panels. In slate-roofed properties built after 1940 solar slates that exactly match the dimension, colour and texture of the original roof slates may be permitted, subject to project specific technical details and samples being submitted for assessment. The solar slates would need to be maintained in good condition in perpetuity or replaced with natural slate to maintain the original appearance.
 - Solar thermal type panels directly heat water for use in the home, while photovoltaic panels generate electricity. Fewer panels are required for heating water than for electricity generation. Solar thermal installations should also not project from the roof slope by more than 0.2m and the distance to roof edges and the ridge apply as above.
 - Panels should be removed as soon as reasonably practicable when they are no longer needed.
- Buildings with front or prominent side elevations facing south-east to south-west present particular problems for owners seeking an installation that complies with the guidelines. If your property has this alignment contact the Scheme of Management office to discuss options that would comply with the guidelines.
- Solar panel installations must comply with the building regulations in terms of structural integrity, electrical and fire safety. For more information see the Government guidance at the [planning portal](#). A directory of qualified installer contractors registered with the Microgeneration Certification Scheme (MCS) is available [here](#).

WHAT TO INCLUDE IN YOUR APPLICATION

- A roof plan drawn to scale showing the location and dimensions of the panels and the distance to the edges and the ridge of the roof.
- Dimensioned section details of the installation (in-line, integrated or raised).
- A technical data sheet confirming the colour, finish and frame colour.
- Three dimensional drawings may be required to demonstrate the visual impact.