



Installing solar equipment on residential buildings

Technical Advice Note

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1. Introduction

- 1.1 This document provides planning guidance on the installation of solar equipment (solar photovoltaic (PV) or solar thermal equipment) on residential buildings.
- 1.2 The Council declared a climate emergency on 29 April 2021 and pledged to make the district carbon neutral by 2040. Solar equipment on roofs will help the Council achieve this objective.
- 1.3 This document explains when planning permission, prior approval or listed building consent is required for the installation of solar equipment on residential buildings. In many cases no planning applications are needed, although building regulations approval may still be required.
- 1.4 This document is correct at the date of publication. Applicants should refer to the latest legislation before commencing development.
- 1.5 The Council recommends seeking professional advice before beginning any project, this document contains Officer advice however it should not be taken as replacement for advice on specific projects.
- 1.6 This document does not apply to ground-based solar equipment.

2. Permitted development rights

- 2.1 Solar equipment of the type shown at [Appendix 1](#) can be installed on roofs without planning permission provided that it does not protrude from the building beyond the limits set out in the [General Permitted Development Order at Schedule 2, Part 14 A.1 \(a\), \(b\) and \(ba\)](#). This applies within and outside conservation areas. The only exceptions to this are:
 - Within a conservation area, if the solar equipment is installed on a wall which fronts a highway (roads, public footpaths and bridleways) planning permission is required. However, if the installation is on a roof fronting a highway, footpath or bridleway, rather than a wall, permitted development rights do apply, and no planning permission is required.
 - If the building on which the solar equipment is to be installed is within the curtilage of a listed dwellinghouse or a listed block of flats, then planning permission will always be required.
- 2.2 One further caveat is that if the proposal is located on a flat roof in a conservation area it is still 'permitted development' but it is subject to a 'prior approval' process (see [Appendix 2](#)).
- 2.3 Within conservation areas Hart has a number of [Article 4 directions](#) which remove some permitted development rights, but they do not remove permitted development rights for solar equipment.

- 2.4 In all cases, solar equipment installed under permitted development rights must:
- so far as practicable, be sited so as to minimise its effect on the external appearance of the building and to minimise its effect on the amenity of the area.
 - be removed as soon as reasonably practicable when no longer needed.
- 2.5 If planning permission is required, please see [Appendix 3](#).

3. Listed buildings

- 3.1 Listed buildings are subject not only to the planning legislation but also to legislation that protects heritage assets.
- 3.2 If the home is listed (i.e. Grade 1, Grade 2*, Grade 2 or curtilage-listed) you will need listed building consent for the installation of solar equipment.
- 3.3 You will not need a separate planning permission if the proposal falls within the terms of the General Permitted Development Order (GPDO) 2015 (as amended) discussed at Section 2.
- 3.4 If planning permission *is* required (because it is not permitted development under the GPDO) this should be considered at the same time as the listed building consent.
- 3.5 Solar equipment on properties within the curtilage of a listed residential building are not covered by the GPDO and require planning permission. If they are curtilage-listed, they will *also* require listed building consent.
- 3.6 Carrying out unauthorised works to a listed building is a criminal offence and individuals can be prosecuted. When listed building consent is required, applicants must receive consent before any work can begin.
- 3.7 An application for listed building consent should include:
- a completed application form,
 - location and block plans (to scale),
 - drawing/plans (to scale) to identify the locations of the proposed solar panels, depth of the solar panels (including fixings) and relationship with the surrounding building fabric,
 - specifications of the proposed solar panels, and method statement outlining installation process and details of any associated alterations to the existing building fabric,
 - a design and heritage statement which explains the history of the building, and the nature of the proposals. Also see the Council's [Heritage](#)

- 3.8 Further information about listed building consents can be found on the [Planning Portal website](#).

4. Climate change and planning decisions

- 4.1 On 29 April 2021, Hart District Council declared a climate emergency and pledged to make the district carbon neutral by 2040. This puts the reduction of carbon emissions at the centre of the Council's policies and formal decision making.
- 4.2 In cases where planning permission or listed building consent is required:
- significant weight will be given to the Council's declaration of a climate emergency in all planning decisions including those related to heritage matters, and
 - there is a public benefit to energy efficiency and renewable or low carbon energy measures which, even in a small way, assist the Council's commitment to making Hart district carbon neutral by 2040.
- 4.3 This approach was agreed by [Cabinet on 4 January 2024 \(Item 77\)](#).
- 4.4 The importance of addressing climate change is reiterated in the Council's [Corporate Plan 2023-2027](#) with the Planet identified as one of three key focus areas. The Corporate Plan includes commitments to:
- use our influence to lead our district to being carbon neutral by 2040,
 - support climate mitigation such as flood alleviation, and the delivery of low or carbon neutral energy generation, and
 - put sustainability at the heart of our local planning processes to include requiring the delivery of energy efficient, climate resilient and adaptable housing.
- 4.5 The Council recognises that solar equipment on residential buildings can help to achieve its climate change objectives.

5. Building control

- 5.1 Building control oversees the construction, extension and alteration of buildings to ensure that they meet safety and performance standards. You may need building regulations approval even if planning permission or listed building consent is not required.
- 5.2 The key Building Regulations for solar panel installations are outlined below.

- 5.3 [Part A - Structure](#) provides design standards and guidance to make sure that residential buildings are structurally safe. When the installation of solar panels will increase the load upon the roof by 15% or more, Part A requires that the supporting structure is checked to ensure it can support the additional weight.
- 5.4 [Part P - Electrical safety](#) provides standards for the design and installation of electrical installations to ensure that they are safe from fire and injury.
- 5.5 All solar PV panel installations must be approved to certify that the works complies with building regulations.
- 5.6 We recommend that you hire an installer who is registered with a [competent person scheme](#). Registered installers can self-certify that their work complies with building standards, removing the need for a formal building regulations application. They will notify the Council's Building Control service that the work has been completed and will give you a certificate to demonstrate compliance with building regulations.

6. Further guidance

- You can check if your home is in a conservation area at [Hart's online mapping tool](#).
- You can check whether a property is listed using [Historic England's search tool](#).
- [Solar panels a bright idea](#), Energy Saving Trust (the guide covers both solar PV and solar thermal equipment).
- [Solar Design Tips](#), Campaign to Protect Rural England
- [Ensuring Place-Responsive Design for Solar Photovoltaics](#), Campaign to Protect Rural England
- [Historic England website](#) including:
 - [Historic England Advice Note 18 Adapting Historic Buildings for Energy and Carbon Efficiency](#)
 - [Historic England Advice Note 10 Listed Buildings and Curtilage](#)

Appendix 1: Rooftop solar PV and solar thermal

A1.1. There are two types of solar equipment which in the majority of cases can be installed on the roof of, or in the grounds of, residential properties under permitted development rights. These can be categorised as solar photovoltaic (solar PV) and solar thermal equipment.

Solar photovoltaic (solar PV)



Image 3: Solar PV on the roof of a home (Image credit: Pexels)

- A1.2. Solar PV panels convert the sun's energy into electricity. The greater the intensity and duration of the sunlight, the more electricity is produced.
- A1.3. While solar PV panels can generate electricity on a cloudy day, electricity can only be generated during daylight. Therefore, the electricity must be consumed as it is being generated, stored in batteries, or exported to the national grid.
- A1.4. Solar PV can also be installed in the form of PV tiles and slates (see image 4). These work in the same way as traditional solar PV panels but resemble traditional tiles or slates. Solar PV tiles and slates may therefore be an appropriate option on historic buildings or in sensitive locations.



Image 4: Solar PV slates (Image credit: Wessex EcoEnergy)

Solar thermal equipment

- A1.5. Solar thermal equipment uses the sun's energy to produce hot water.
- A1.6. Generally solar thermal equipment is not used to heat a home and works in combination with a central heating system.
- A1.7. Solar thermal equipment can generate between 55% and 70% of a home's hot water requirements, reducing a home's carbon footprint and energy bills.



Image 5: Solar thermal panels on a roof (Image credit: Energy Saving Trust)

A1.8 Under the [GDPO](#), there are limits on the extent to which the solar equipment can protrude from the building:

- they must not protrude more than 0.2 metres beyond the plane of the wall or in the case of a pitched roof, the roof slope when measured from the perpendicular with the external surface of the wall or pitched roof slope;
- in the case of solar equipment on a pitched roof it must not result in the highest part of the solar PV or solar thermal equipment being higher than the highest part of the roof (excluding any chimney);
- in the case of solar equipment on a flat roof, it would result in the highest part of the solar PV or solar thermal equipment being more than 0.6 metres higher than the highest part of the roof (excluding any chimney).

Appendix 2: Prior approval

- A2.1 If solar equipment is proposed on a flat-roof within a conservation area, then before beginning development an application must be made to the Council for a determination as to whether the prior approval of the Council will be required with respect to the impact of the appearance of the solar equipment on that land.
- A2.2 Applications for Prior Approval can be submitted via the Planning Portal, in hard copy, or via email to planningadmin@hart.gov.uk.
- A2.3 The application must be accompanied by—
- (a) a written description of the proposed development,
 - (b) a plan indicating the site and showing the proposed development,
 - (c) the developer's contact address, and
 - (d) the developer's email address if the developer is content to receive communications electronically,
- together with any fee required to be paid.
- A2.4 In addition to the requirements above, to help planners assess your proposal you may wish to submit the following additional information:
1. A detailed elevational plan, to scale, showing the solar equipment on the building;
 2. A cross-section showing how far the equipment would protrude from the building;
 3. A brochure or manufacturer specification showing the technical details and finished appearance of the equipment; and
 4. Photographs of the site and surrounding area.
- A2.5 The Council has 56 days from the day of submission to decide the application. The Council can decide that:
- Prior Approval is not required, and the development can go ahead with no conditions; or
 - Prior Approval is required and given, subject to conditions; or
 - Prior Approval is refused, and the development cannot proceed.
- A2.6 Any planning conditions, or reasons for refusal, will be set out in the Decision Notice.
- A2.7 If no decision is given by the expiration of 56 days, the development may proceed under 'deemed consent'.

- A2.8 In reaching its decision the Council will have regard to any representations received, as well as any relevant parts of the National Planning Policy Framework (NPPF), as if the application were a planning application.
- A2.9 If you require assistance with submitting an application for Prior Approval, please speak to Hart's planning admin team, who can be contacted on 01252 774419 or via email at planningadmin@hart.gov.uk
- A2.10 Further guidance on the prior approval process can be found on the [Planning Portal website](#).

Appendix 3: Planning permission

- A3.1 If the proposed solar development cannot be carried out under permitted development rights, planning permission is required before development can begin. In most cases planning applications to install solar equipment should be submitted as a householder application.
- A3.2 Guidance about the planning application process can also be found on the [Hart District Council website](#). This includes information about:
- [pre-application advice](#),
 - [householder planning application validation requirements](#), and
 - The [supporting information required](#) for each type of application.
- A3.3 Planning applications can be submitted via the [Planning Portal](#). Planning applications are subject to [nationally set fees](#). There is currently no fee for Listed Building Consent.
- A3.4 Applicants are advised to speak to the Council before beginning a project if they are unsure about what is required. General advice about submitting applications can be sought from Hart's planning admin team which can be contacted on 01252 774419 or via email at planningadmin@hart.gov.uk.
- A3.5 For detailed advice on the acceptability of your proposal, you are encouraged to use the Council's pre-application advice service. An officer can review your proposal and advise on the likelihood of permission being granted, along with any amendments that might be needed. Separate advice from the Heritage Team is also available. You can apply and pay for this advice online at [Pre-application advice](#).

Glossary

Array: a collection of multiple solar panels working together as part of the same installation.

Conservation areas: areas of special architectural and historic interest, the character and appearance of which is desirable to preserve or enhance.

Curtilage: land which forms part and parcel with the house. Usually it is the area of land within which the house sits, or to which it is attached, such as the garden, but for some houses, especially in the case of properties with large grounds, it may be a smaller area.

Curtilage listing: any object or structure within the curtilage of the building which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948.

Listed building: a building of special architectural or historic interest which is of national importance and therefore worthy of protection. Listed buildings are graded based upon the significance of the building. Grade I is reserved for buildings of the highest significance, followed by Grade II* and Grade II.

Solar photovoltaic (solar PV): a technology which uses solar panels to convert the sun's energy into electricity.

Solar thermal equipment: a technology which uses the sun's energy to heat water.