9. Building services equipment

KEY MESSAGES

Building services equipment should:

- not harm occupant or neighbour amenity, health and/or wellbeing;
- be incorporated into the host building aesthetically;
- have a minimal impact on the environment; and
- not harm listed buildings, conservation areas or streetscapes.
- 9.1 Building services equipment, whether used for heating and cooling, communications, power, plumbing, ventilation, access, security or other services, if not considered appropriately, can cause significant visual blight and nuisance for neighbours and can negatively impact on conservation areas, listed buildings and be visually detrimental to the townscape.
- 9.2 Noise and vibration from building services equipment must be avoided as it can have a significant negative impact on health and wellbeing by causing disturbance and increasing stress levels.
- 9.3 The purpose of this guidance is to ensure that necessary building services equipment can be incorporated into development, while having minimal impacts. Impacts that are likely to require minimisation or mitigation include visual blight, light nuisance, noise nuisance and vibration, odour, and other environmental pollutants or nuisance.
- 9.4 This guidance relates to Camden Local Plan 2017 Policy D1 Design, Policy A1 Managing the impact of development, and Policy A4 Noise and Vibration.
- 9.5 This guidance does not specifically apply to renewable energy installations or telecommunications as they are considered in other guidance, although the general principles included here may be relevant. For further information see Energy Efficiency and Adaptation CPG or CPG Digital Infrastructure (section on Telecommunications equipment).

How should building services equipment be treated?

Amenity

- 9.6 In line with Local Plan Policy A4, the Council will only grant permission for noise generating development, including any plant and machinery, if it can be operated without causing harm to amenity, health or wellbeing.
- 9.7 Planning permission will not be granted for development likely to generate unacceptable noise and vibration impacts, in light of the

negative impact that this can have on the health and wellbeing of residents.

- 9.8 When development that is likely to generate noise is proposed, the Council will require an acoustic report prepared by a qualified acoustic consultant/engineer to accompany the planning application. For further details on when an acoustic report should be prepared and what information it should include, please see Camden Planning Guidance on Amenity section 6 on Noise and Vibration.
- 9.9 Planning applications will be assessed with regard to the noise and vibration thresholds set out in Appendix 3 of the Camden Local Plan.
- 9.10 Planning conditions will be imposed to require that plant and equipment which may be a source of noise is kept working efficiently and within required noise limits and time restrictions.
- 9.11 Proposals for new noise or vibration-generating equipment close to residential and other noise-sensitive uses should include measures, such as sound-proofing, to mitigate and manage the impact of neighbouring uses.
- 9.12 Plant and machinery with moving parts must be separated or insulated from occupants and neighbours who are likely to sensitive to noise disturbance. Techniques to achieve this separation include the use of flexible ducting, or resilient mountings for structure-borne plant and machinery. For further details on mitigating noise impacts, please see Camden Planning Guidance on Amenity section 6 on Noise and Vibration.
- 9.13 Where mechanical or passive ventilation is required to remove odour emissions, the release point for odours must be located above the roofline of the building and, wherever possible, adjacent buildings.
- 9.14 Where ducting, plant or machinery are required on the outside of a building they must not obscure access to daylight and sunlight, or provide any nuisance for occupants of the development or adjacent buildings. For further details, please see Camden Planning Guidance on Amenity section 3 on Daylight and sunlight.

Design considerations

- 9.15 In new development, all building services equipment:
 - must be given the same level of consideration and quality in design as other elements;
 - must be integrated within the building or development structure;
 - must be incorporated into the external building design where, because of its nature, it cannot be integrated within the building; and
 - should not be a dominant feature of the building.
- 9.16 In relation to tall buildings, the potential visual impact of building services equipment is greater and additional care needs to be taken to ensure that it is considered at the design stage and is fully incorporated into the

building structure. Roof-top plant should be concealed, usually behind a raised parapet.

- 9.17 In refurbished development, plant and machinery should be accommodated within the building structure, or incorporated into the design of external modifications. External plant or machinery should be avoided. If unavoidable, external plant or machinery should be positioned to minimise its visual impact.
- 9.18 Other design considerations for building services equipment include the following:
 - use of screening or other techniques to minimise the impacts of plant, machinery and ducting must, in themselves, not cause visual blight.
 - plant and machinery on roofs should not be visible from the street, public vantage points or from immediately adjacent buildings.
 - the design and materials used for plant, machinery and ducting, as well as for ancillary structures such as screening, where located on the exterior of the building, must be consistent with those of the building.
 - plant and machinery should be designed in such a way that does not lead to issues of health, safety and security.

Conservation areas and listed buildings

- 9.19 Special consideration should be given to the installation of building services equipment, such plant, machinery and ducting, on listed buildings and in conservation areas.
- 9.20 Design considerations for building services equipment in listed buildings include the following:
 - Listed building consent is required for the majority of works to listed buildings.
 - Confirmation as to whether consent is required should be sought from the Council in advance of any works commencing.
 - Undertaking a detailed building survey in advance of any works will help in identifying the most appropriate solution for accommodating building services equipment.
 - Installations must be in keeping with the design and materials of the building.
 - Installations should minimise the loss of, and permanent damage to, the historic fabric.
 - It should be carefully considered whether installing building services equipment internally or externally is most appropriate way to minimise harm.
 - The shortest or most direct route for cables, ducting or pipework might not be the most appropriate and a longer route may be less damaging.

For further advice, please see <u>guidance from Historic England</u> on installing or replacing building services in historic buildings.

- 9.21 Design considerations for building services equipment in conservation areas include the following:
 - The visual impact of building services equipment should be considered, including views into and from conservation areas.
 - External solutions are less likely to be appropriate in conservation areas than in other locations.
 - Each conservation area has a Conservation Area Statement or Appraisal and Management Strategy which provides further guidance on specific issues relating to each area.

Further information about Camden's conservation areas can be found <u>here</u>.

Air-conditioning and renewable energy

- 9.22 Active cooling (air conditioning) will only be permitted where dynamic thermal modelling demonstrates that there is clear need for it and after other measures have been considered. All new development should submit a statement demonstrating how the 'cooling hierarchy' set out in London Plan has been considered. Please see Camden Plan Policy CC2 Adapting to climate change and the Energy Efficiency and Adaptation CPG for further details.
- 9.23 Where the need for air conditioning has been demonstrated, only the minimum number of air-conditioning units proved to be required should be installed.
- 9.24 Air-conditioning units can cause significant visual blight and their location should be carefully considered to minimise their visual impact, in accordance with the above guidance on design, conservation areas and listed buildings, and amenity.
- 9.25 Air-conditioning units can negatively impact health and wellbeing through noise and vibration. Measures to mitigate this impact, such as acoustic enclosures, should be included in development schemes in line with Local Plan Policy A4 Noise and vibration.
- 9.26 Plant and machinery, particularly where located on roofs, must not preclude the installation of required onsite renewable energy facilities as part of the development. Consideration must also be given to the possibility of future renewable energy installations.

Other considerations

- 9.27 Other design considerations for building services equipment include the following:
 - Secure access to plant and machinery must be provided to allow for convenient and safe servicing and replacement of installations.

- Machinery must be properly installed and maintained to ensure that impacts are properly mitigated and the situation does not deteriorate over time with continued operation.
- Plant and machinery should be located as close as possible to their end use, e.g. boilers should be located near to the hot water or heating users, to minimise use of ducting materials, loss of resource and visual blight.
- Disused plant, machinery and ducting must be removed from the exterior of buildings before replacements are be installed.