

Justification for proposed installation of air conditioning condenser unit

Houses on the north side of Richardson's mews have the problem of overheating due to their initial design. They are built identical to each other with low ceilings and huge almost 'panoramic' windows on the second floor. These two factors benefit the houses in cold times by absorbing the sun from the south with the huge windows and easily keeping the heat in small volume rooms. However, in summers that are getting hotter and hotter, these unchangeable aspects of the houses became a huge trap for overheating. To the point that it is impossible to be on the upper floors even at night. You can see from the picture that our neighbours have successfully installed the aircon on their roof and are happy using it to resolve the problem of overheating.

When I was renovating the house last year, I really wanted to make it as ecologically friendly and efficient as possible. I have insulated between floors and obviously the roof, provided the new energy-efficient lighting, appliances, new boiler and heating controls, all the piping was properly insulated as well. Changed the doors and the windows into double glazed windows, with a special thing inside that provides even more insulation (I have the 'Yes' from Camden). I also have permission from Camden to install the solar panels on the roof that would connect to the electric system of the house, making it very green.

So internal heat generation is mastered by isolation of pipes, new energy-efficient lighting, and appliances with an energy-efficient design. The isolation of the roof and new windows with white/cream blinds are reducing the amount of heat entering in summer. All windows are possible to open to provide some ventilation, which is quite limited in the mews when it is hot.

So the problem of overheating is still very much there even though we took all the possible measures. I could see active cooling as the only further solution to this problem. As I saw that our neighbours have an aircon on the roof, I thought it would be a great idea to install one too - a very good and efficient high-tech cooling system (I'm sorry I was unaware that it needs permission). In Japan, the newest aircons are widely used as heaters too. In view of the recent gas price increases (almost 60%), it can also be a very good alternative - you can easier target-heat/cool the area when you are (instead of just heating the whole house). So, due to my aircon being a new efficient model I can safely say that it is an eco-friendly way of cooling.