

metroSTOR Webinar Whitepaper

E-mobility Devices & The Building Safety Act - 19.01.23

Guest Speaker: Chris Waterman

E-mobility Fire Risk – Nigel Deacon

Why are e-mobility devices a fire risk?

The 2018 NFCC guidance on storage of mobility scooters is a great guide but since then LiBs have become mainstream and the proliferation of e-bikes and e-scooters is extending the potential scope to all residential blocks, regardless of demographics. Despite their advantages, LiBs are inherently unstable. There is a risk of toxic gas emission, severe fire and explosion, plus a potentially catastrophic reaction known as thermal runaway, in the event of physical damage or overheating.

How big a problem is this?

These situations can easily occur with e-mobility devices due to the nature of their usage, unregulated sale of poor-quality products and tendency for users to purchase non-genuine replacement batteries and chargers or even self-build in some instances. But it's the fact that these devices are being charged within people's homes that renders them one of the most significant emerging risks in housing. In 2022 there were 22 fatalities recorded worldwide including 3 in the UK, making it critical that landlords have appropriate controls in place.

Building Safety Act – Chris Waterman

Responsibilities created by the Building Safety Act

Fire Safety has to be taken into account at every stage of the design and construction process, but concerns remain about establishing competence and experience. There is a huge need for culture change across all professions and trades. Once the building is complete and inhabited resident responsibility is critical and we may not yet be taking sufficient account of them, in terms of the quality of goods they purchase and where they charge them, for example.

Charging within flats

The Building Safety Act increases the responsibility on landlords in respect of what residents may have within their flats. There's a need to tighten up rules for tenants and exercise right to inspect with notice, but this needs to be strengthened, without recourse to lengthy court process. We need a whole separate conversation around how landlords are practically going to discharge their duties, but we have a deregulatory, libertarian government, and the traditional inspection culture that used to exist within neighbourhoods has now gone.

Communal areas are already being managed under the requirements of the Fire Safety Act, but it is unfeasible for Accountable Persons preparing a Building Safety Case to know whether scooters are stored within flats. Could residents be made responsible to declare? We must find a way to gather quantifiable evidence for this to move up the agenda and in the meantime make it clear that e-mobility represents a significant, identified risk that we are unable to manage.

There is a need for specific methods for communicating with vulnerable residents, possibly using volunteers from community. Essential that landlords empower residents by providing regular clear and illustrated communications on the risks of such devices and advise on purchasing, safe usage, charging and storage. There is scope to create an online library for sharing such resources.

Funding for fire safety work

Social landlords have challenges with funding fire safety work, particularly as, in many cases, mobility scooter users will not be able to contribute to the capital cost or even the rent for a safe storage facility. We need to raise the profile of the risk, at government level, so that provision can be properly funded.

Potential conflict with the DDA Act

It is accepted that many mobility scooters will be of a high quality and well-maintained, but unfortunately the sale of such products is unregulated, so poor-quality examples abound. Unless there is a frequent testing and certification process, preferably using barcodes for instance, a landlord has to consider the worst-case scenario. We're ultimately weighing up the rights of the many residents living in an entire block with those of a disabled person with a defective scooter who could be in breach of their lease and may therefore have to move to an alternative dwelling if a safe place for charging cannot be found.

Takeaway actions

- Communicate Effectively to residents the fire risk posed by e-mobility devices
- Provide clear recommendations regarding purchasing, safe usage, charging and storage
- Consider excluding all non-essential e-mobility devices from within buildings
- Provide secure external charging lockers for all e-mobility devices
- Detailed PEEP assessment for mobility scooter users to find best resolution