



Technical Warning Notice

Subject: Existing homelifts – risk of overloading upper floor aperture infill panels

Background

This notice relates to homelifts which are powered lifting devices with partially enclosed carriers and no liftway enclosures; used in domestic premises to allow access between floors. When the carrier travels to the upper floor, it moves through an aperture in the upper floor. When the homelift is at the lower level, this aperture is protected by an infill panel which is raised when the carrier moves through the floor aperture. This type of product is typically manufactured to comply with the relevant British Standard, BS 5900, for this type of device. The previous version of BS 5900, published in 1999 has recently been superseded by the current version published in 2012.

We have been made aware of an incident in which a person using a homelift installed in accordance with the previous version of BS 5900 standard was injured. The circumstances of this appear to be that the person used the carrier to travel from the ground floor to the upper level and then sent the carrier back to ground in order to be able to move unhindered across the upper floor. As they moved across the aperture infill panel of the homelift, now forming part of the floor, the panel collapsed resulting in them falling to the lower level.

At the time the previous version of BS 5900 was written, the use of large battery powered wheelchairs was not prevalent. Therefore, whilst the lifting capacity of the homelift might have been 250 kg, the aperture infill panel only had to support 150 kg (although some products would have had a larger rating). The current version of BS 5900 requires the infill panel to be rated at least to the rated load of the carrier.

Guidance to maintenance companies, owners and responsible persons

The use of a large battery powered wheelchair or mobility device, in combination with the weight of the passenger, presents a risk of exceeding the infill panel strength on existing homelift installations. Where these existing devices are installed, and the user now makes use of a powered wheelchair, there is a potential for overloading of the infill panel, when it forms part of the upper floor level.

We strongly recommend that maintenance companies bring this issue to the attention of owners and, where appropriate, health care professionals or other responsible person. We would advise maintenance companies to report clearly on: the rated load of the infill panel (if known); whether this exceeds the combined weight of the powered device and passenger; any evidence of overloading or misuse; and recommended actions to address potential overloading of the upper floor aperture infill panel. Owners and health care professionals or other responsible persons should consider any recommendations to address this risk e.g. not loading the infill panel until its strength has been increased.

In cases where a risk of overloading is identified, the original homelift manufacturer or the maintenance company should be able to advise on the rated load of infill panel installed and possible improvements to address this risk e.g. increasing the strength of the infill panel.