

## Sprinkler Systems in Residential Flats

The Corporate Fire Safety Advisor has provided the following advice to Housing:

- **All relevant health and safety legislation and Building Regulations are to be complied with.** Current regulations in England mean that only buildings constructed since 2007 and which are taller than 30 metres are required to have sprinklers fitted. This requirement was not retrospective and therefore, under the law, existing high rises in England only need to have sprinkler systems fitted if a fundamental change is made to the structure or use of the building.
- **The retrofitting of sprinkler systems in blocks of flats should be undertaken when an assessment of the structural capacity to house such a system and a fire risk assessment that considers both the fire evacuation strategy and other fire precautions supports such action.** Post Grenfell Housing have commissioned fire engineering consultants to reassess the fire risks and existing fire protection measures at all blocks of flats and sheltered accommodation with communal areas. The assessments have also challenged the fire evacuation strategy at each site. It should be noted that lessee rights, heritage/planning considerations may similarly influence any retro fitting of sprinkler systems.
- **Evidence shows that while sprinklers are primarily intended to contain or control fires, they can also be instrumental in saving the lives of people in the room of origin of a fire. However, sprinkler systems have capacity limitations and once multiple sprinkler heads have activated a water storage tank would quickly empty making the system ineffective.** Some experts are of the view that if a retro sprinkler system had been fitted at Grenfell it would have had little effect because multiple sprinkler heads would have activated emptying tanks quickly and fact that the fire's initial route between floors and adjacent flats was via cladding on the outside of the building.
- **Good fire compartmentation together with clear communication to all relevant stakeholders on the evacuation strategy should be among the top priorities for Housing in flats and sheltered accommodation. Where, so far as reasonably practicable, Housing should also strive to exceed national standards and ensure that each flat has 60 minutes compartmentation.** Housing have arranged fire standard testing a range of flat front doors to see what levels of protection they afford flat occupants.
- **Housing should keep abreast of all recommendations that emerge from the post Grenfell enquires and be prepared to evaluate the implications and where necessary act.**
- **Standalone sprinkler systems should be fitted in individual flats where it is identified as a key Personal Emergency Evacuation Plan (PEEP) control measure.**