



## **Petticoat Tower Retrofitted Water Suppression Sprinklers**

### **Q & A**

#### **The Proposal**

#### **1. Where in my flat will the sprinklers be located?**

Sprinkler heads will be located in the kitchen, bathroom, living room, bedroom, hall and balcony of each flat. The requirement for sprinkler heads in all of these locations has been confirmed with the London Fire Brigade, Building Control and City of London Corporation fire officer.

#### **2. Why is it necessary for there to be a sprinkler on the balconies?**

This has been a requirement by LFB as they have experienced BBQ's & smouldering cigarette that have caused fires.

#### **3. Will sprinklers be installed in communal areas such as landings and stairwells?**

Pipework & valves will be located only in these areas but no sprinkler heads these will only be provided in dwellings, sprinkler plant areas and residents store area at basement level.

The installation and route of pipework in each location will depend on the nature of the area. The sprinkler system is also being tailor designed with consideration of the sensitive architectural heritage components of the building.

#### **4. Will there be any exposed pipework? Will it go across the ceiling?**

The pipework for the sprinklers will be concealed inside voids as much as possible and any exposed will be sympathetically boxed with decorated boxings. The exact run of the pipework will be confirmed once we start on-site because every home in the building will be slightly different, in terms of the



location of cupboards etc so we need to remain flexible to accommodate this.

There will be exposed painted pipework in the stairway and communal corridors.

**5. What colour will the conduit be painted?**

There are both conduits and pipework and they will be painted to match existing services.

**6. The sprinkler heads are relatively small why is the proposed boxing so large?**

The boxing depth is set to the required distance from ceiling to centre of head and projection to allow for the pipe bend onto the head.

**7. Can the sprinklers be set off by e-cigarettes?**

No, the outer disc of the sprinkler requires a temperature of 57 degrees to fall off and expose the head, which then requires a temperature of 74 degrees to operate and allow the flow of water.

**8. I am concerned that installing sprinklers into individual flats could cause huge amounts of water damage?**

Sprinkler systems are under the same pressure as the plumbing system but are tested at 2-3 times higher pressure during installation. The system is held at pressure and all pressure gauges are regularly inspected. In the unlikely event that there is a leak, the system alarms will operate and initiate an instant response for remedial action, which is not the case with the domestic plumbing system.

Each sprinkler head is independent and only the head(s) adjacent to the fire will go off. Sprinkler heads are designed to react individually to temperatures in each room. In most fires, only the sprinkler over or closest to the fire will activate.



When activated a typical sprinkler discharges 55 litres per minute. A firefighting hose discharges over 600 litres per minute. You can expect a sprinkler to discharge less than 5% of the water used by the fire service.

In the event of water discharge from the sprinkler system this will activate the alarm flow switch which in turns notifies therefore the risk is much lower than the plumbing system.

**9. I am worried that given the fire alarms can falsely trip, will the same happen with a new sprinklers system?**

While the fire alarm and sprinkler systems are connected, they operate independent of each other and are activated in different ways. The sprinkler alarm is operated by a flow switch, which needs to detect a flow in the pipe before activating. Records show that the chance of an accidental discharge from a defective sprinkler head is in the region of 16 million to one.

**10. What are the cons attached to having sprinklers installed?**

The most prevalent cons of sprinkler systems relate to the cost associated with the installation, as well as disruption to residents during the installation and maintenance process. In recognition of these cons, the City Corporation will be covering all costs to install the sprinkler system. We have also identified measures and protocols to be followed to manage the installation and maintenance processes, to ensure the works are carried out with as little disruption to residents as possible.

We are aware that residents may also consider the aesthetic of having pipework and sprinkler heads visible to be a con of the sprinkler system. In response to this, the City Corporation has been looking at bespoke designs to ensure the system has as minimal impact as possible on the residents and the fabric of the building. Pipework will be confined as far as possible to reduce visual impact and where it cannot be confined it will be painted to match existing conduit. The sprinkler heads are also small, white, and recessed. All that will be visible is a white 85 mm diameter thin disc, which will protrude from the finished surface by approximately 4mm.



## **Installation/Future Works**

### **11. Can you provide clarification on the works that will be undertaken on the elevations of the building?**

External elevation works include one sprinkler head penetration onto the balcony.

### **12. When Works start, what is the process for obtaining access to my flat?**

The contractor will be in touch at least seven days before requiring access to each flat to install the sprinkler system. This is a standard procedure, which will be followed to ensure contractors do not turn up and expect access with less notice than seven days.

### **13. What are the estimated timeframes, in hours and days it's anticipated these works will take per flat?**

It is anticipated that the works will take approximately 3-4 days to complete in each flat. The contractors will remain on-site throughout the duration of the installation process.

### **14. Will a dedicated Project Manager representing the City of London Corporation be based on-site daily to monitor the works?**

Yes, we will have a Project Manager responsible for this project and they will be responsible for the day to day project management of the scheme, but City Corporation officers will also be closely involved. The project Manager will not be based onsite but will be onsite regularly, and we will also have a clerk of works and our design consultants Butler & Young who will be making regular site visits to ensure the works are delivered to the required standard. The contractor will also have a resident liaison officer who will be dedicated to working with residents and answering any queries you have during the delivery of the works.



**15. There are times restrictions for noisy works, but what constitutes reasonable noisy work in a residential building and who from the City Corporation will monitor this?**

We have time restrictions for works that are considered very noisy. This would involve drilling into concrete slabs and / or breaking out concrete. There will be some noisy works associated with attaching the pipework to the ceiling etc, and this would most likely be done during those restricted hours. There are decibel ratings from the HSE for what constitutes noise from construction, but these tend to relate to contractors who are working permanently exposed to these noise levels whereas that won't be the case for this project. It will be the responsibility of the entire project team to monitor the noise levels and ensure they adhere to the restricted hours.

**Next Steps**

**16. Do residents need to look at getting additional insurance to cover having sprinklers installed?**

We would not expect personal insurance premiums to increase because of the sprinkler system being installed as it is an added protection from fire damage. Fire damage far outweighs the damage that would be caused from the activation of a sprinkler.

Do get in touch with us if you face any problems from your regular insurance provider and we will provide additional information where we can to assist with your discussions.

**17. Will an exhibition or face-to-face event be held for residents?**

We are very keen to set-up a public exhibition that can be semi-permanent to allow residents flexibility to come and view the plans. While restrictions are in place, we unfortunately are unable to do this face-to-face.

We are in process of setting up a dedicated project website and once restrictions ease, we will be back in touch regarding an exhibition.



**18. Will we be able to see the equipment and pipes ahead of them being installed?**

When allowed samples will be available to show during any future events, including one-to-one meetings to discuss with residents. We have included some images in the booklet to help give an idea of the different parts.