

Sprinkler reliability and effectiveness

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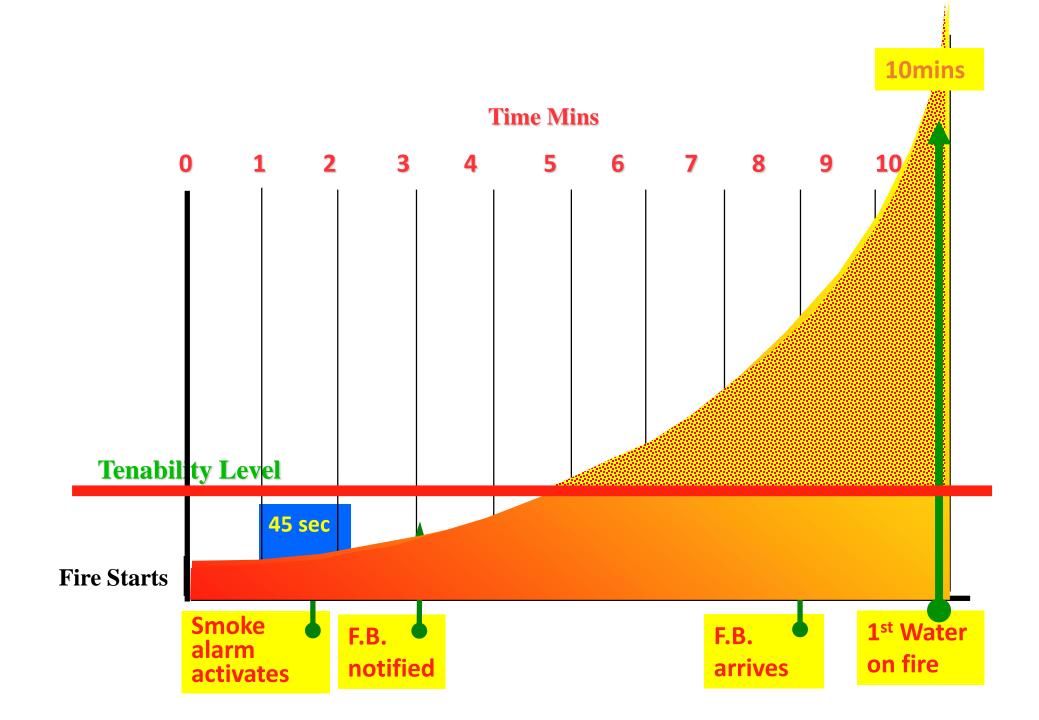
Cross Party Group on Accident Prevention

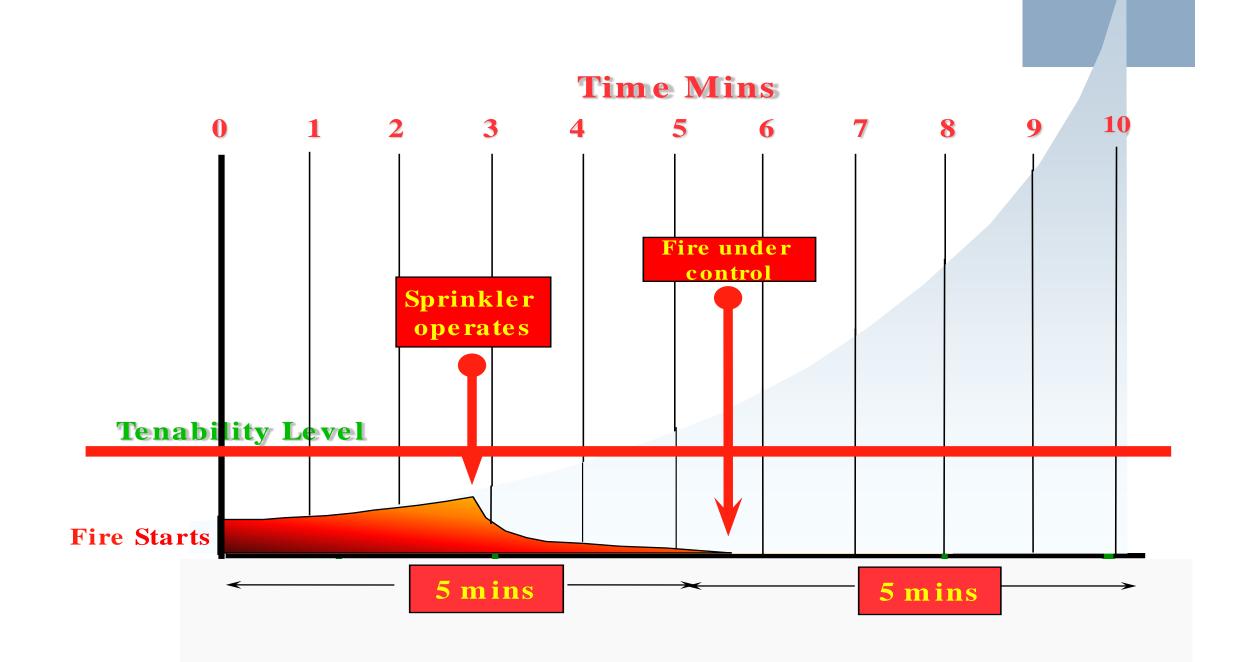
Protecting people, property and the environment

### What sprinklers do

- Independent heat sensing elements detect a fire
- Raise an alarm
- Automatically apply water to fire area controlling fire size and growth
- Reduce the toxic effects of smoke
- Prevent flashover development
- Increase evacuation time
- Allow more time for F&RS to attack the fire
- Reduce fire damage by up to 95%







#### Scotland's Standard

- Enclosed Shopping Centre
- Required in all new Residential Care Homes
- Sheltered Housing Complex
- High rise domestic over 18m high
- All new schools
- Hospital high risk areas and Departments.
- Warehouses over  $14,000m^2$
- Some local authorities have it mandatory in their social housing.



#### Who are the vulnerable?

- Older people
- Children and young people
- People with learning or physical disabilities
- People with mental illness, alcohol or drug abuse problems
- People in temporary accommodation or other poor housing

Two main factors where suppression systems are essential?

- 1. High probability of a fire occurring
- 2. Low probability of escape





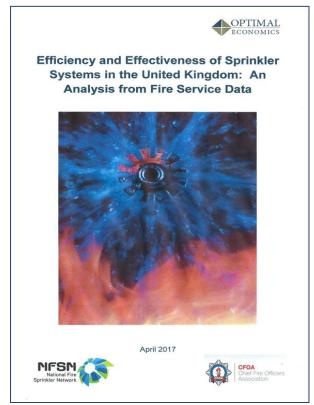
## Hostel: 9/6/15



### Sheffield mobility scooter fire January 2016



## Optimal Economics







# **Thanks**

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