

THE GHERKIN

CASE STUDY

CLIENT: 30 St Mary Axe,
The Gherkin, London, UK

SECTOR: Commercial Offices

PROJECT: Smokestop™ Smoke
Curtain Barriers

APPLICATION: Compartmentation



coopers

EST. 1983

LEADING THE WAY IN FIRE PROTECTION

COOPERS PROTECT LONDON'S ICONIC GHERKIN

WHAT TYPE OF FIRE PROTECTION WAS THE CLIENT LOOKING FOR?

One of London's most iconic and prestigious landmarks, 30 St Mary Axe, known as the Gherkin, is one of the UK's most distinctive buildings. Designed by world-renowned architect Lord Foster, the Gherkin's unique design exemplifies a modern open plan office. For the open plan office to remain as the architect had intended, a unique approach to smoke and fire management was necessary.

Protecting the building's 41 floors from smoke migration required a comprehensive smoke containment and channelling strategy designed to move smoke safely through and out of the building, effectively separating the tower's occupants from the deadly effects of smoke in the event of a fire.

Fosters + Partners planned to utilise the latest smoke barrier technology as a method of facilitating the Gherkin's open plan office environment. This strategy would see retractable smoke curtain barriers installed on 39 of the Gherkin's 41 floors. In the event of a fire, the barriers deploy to form a channelling system designed to work with the building's smoke control system, and moving the smoke through and out of the tower safely.

HOW DID COOPERS HELP?

Fosters + Partners having previously worked with Coopers in the commissioning of London's City Hall (GLA building), Stanstead Airport, to name but a few, were familiar with the high standards that Coopers fire and smoke curtains are tested too. Furthermore, Coopers reputation for delivering on high profile contracts around the world meant that they were qualified to overcome any challenge that a project may present.

“ Protecting the world's most iconic buildings from the harmful effects of fire ”

Coopers were appointed to supply smoke curtain barriers for the Gherkin and quickly started working with appointed fire engineers, Arup, in developing a smoke curtain barrier system to fit within the ventilation voids and work in conjunction with the building's Smoke and Heat Exhaust Ventilation System (SHEVS).

Coopers solution was to install SmokeStop™ smoke curtain barriers. Concealed within the ceiling voids the SmokeStop™ smoke curtain barriers were developed to deploy in the event of fire, channelling smoke away from occupants and extracted out of the building. This effective strategy for containing and channelling smoke would ensure that The Gherkin's 41 floors were protected from filling with smoke thus providing a safe and tenable means of escape.

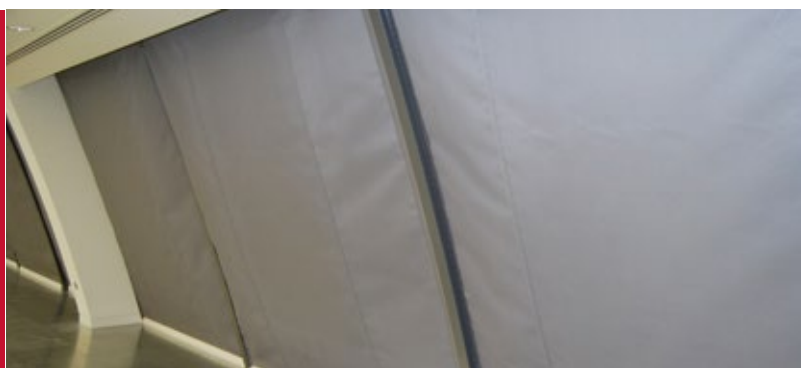
BENEFITS

Coopers manufactured, installed and commissioned over 100 SmokeStop™ smoke curtain barriers to form an integral component of the Gherkin's smoke control system. Working closely with fire engineers, Arup, Coopers helped to ensure that The Gherkin's unique open plan office configuration remained as was intended by Fosters + Partners vision. Furthermore, Coopers installed the smoke curtain barriers to blend sympathetically with the building's architecture.

Each curtain has been developed to deploy under controlled, safe speeds using Coopers patented true TOTAL fail-safe by gravity (TGFS) and was manufactured by Coopers in the UK. Coopers continue to conduct planned maintenance and servicing on all of the Gherkin's smoke curtain barriers.

KEY BENEFITS

- Manufactured by Coopers in the UK under ISO 9001
- Help to facilitate open plan designs
- CE Marked
- Recognised approval under an Independent Third Party Certification for installation, commissioning and servicing



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Coopers Fire Ltd has a policy of continuous product improvement.

As such we reserve the right to change design and specifications without prior notice.

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