

## Project Profile

# 'Raising a note at Birmingham's Symphony Hall'

Application: Smoke Location: Europe Sector: Leisure [52.4784302 - 1.9102314](#)



## BACKGROUND

Symphony Hall is the centerpiece of Birmingham's Centenary Square and is considered one of the finest concert halls in the world.

In 2020, work commenced on a £13.2m project entitled 'Making an Entrance' where the creation of a new foyer would create a focal point within the venue for artistic performance, as well as being a learning and creative hub, so allowing multiple events to be staged under one roof.

During the early stages of the project, the team at SE Controls was approached to facilitate all stages of a bespoke smoke ventilation system for a venue, which has a seating capacity of over 2,000 and hosts around 270 events annually.

## AT A GLANCE

### Product Focus

#### OSLoop Control System

A modular smoke control system comprising of a centralised coordination module, (the coordinator) which can control up to 64 remote manual control points, or MCPs.



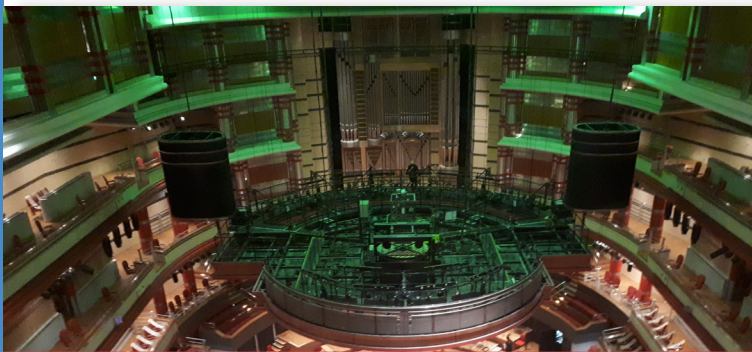
[Watch OSLoop overview video](#)

#### SHEVTEC Repeater Panel

Designed to provide system status information for each vent within the smoke ventilation system.

#### Tamperproof Manual Control Points

Designed to eliminate nuisance activation of the Smoke Control System, whilst delivering the full functionality of an MCP in accordance with pr EN 12101-9.



## CHALLENGE

Working to the client's exacting brief, which encompassed the design, installation, and commission of a fully compatible Smoke Control System for the latest development stage of Birmingham's iconic Symphony Hall.

**The Auditorium in Birmingham Symphony Hall**

## SOLUTION

Key to the installation is SE Controls' powerful OSLoop Control System which distributes power and data to the network. At the same time, it intelligently monitors the current requirements of the system, detailing how and when the Manual Control Panel Points (MCPs) in the system can call on this power to activate the Automatic Opening Vents (AOVs).

In a fire situation, smoke is vented via a fire-resistant smoke control damper integrated into a bespoke spigot/shaft ventilation system, both fire rated at 2 hours.

The system is topped off by a roof-mounted stack fan assembly offering a compact footprint, so minimising roof space requirements.

System monitoring is conducted via a number of SE Controls' Tamper Proof Manual Control Points (MCPs), developed to eliminate unauthorised or false system activation, whilst delivering the functionality of an MCP in accordance with pr EN12101-9.

## SOLUTION

Along with acting as the basis of a system monitor, the MCP offers fully intelligent zone control panel monitoring, including:

- [Smoke Detector Inputs](#)
- [Cable Outputs](#)
- [Smoke Vent Positions](#)

If a fault is detected by the MCP a local alarm is raised and a signal is sent to the coordinator, which triggers a remote alarm.

These alarms are displayed on a [SHEVTEC Repeater Panel](#) located in the International Convention Centre, which also manages building safety and security for Symphony Hall.

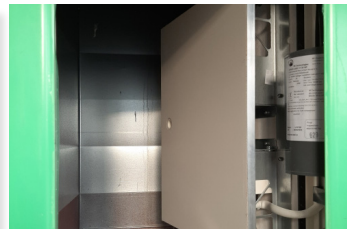
In the event of a fire, the panel provides instant information on the affected area as well as providing system status information for routine maintenance and diagnostic checks.

## PRODUCT IMAGES

[Click to enlarge](#)



Fan Control Panel



Smoke Damper



Tamper Proof MCP



Repeater Panel

## THE RESULT

Today the latest phase of the development of Symphony Hall is protected with a fully compliant compact Smoke Ventilation System that meets all current standards relating to modern Smoke Ventilation Systems.

As with all systems of this type, it has two key roles:

- To protect escape routes, venting smoke away from them to allow occupants to evacuate the building safely.
- Provide greater access to the building for the fire service allowing them to tackle the fire more effectively.

**Smoke Control Damper & Tamperproof MCP in situ**



For the past 40 years, SE Controls has been at the forefront of the [development of innovative control systems](#) that harness sustainable natural elements creating safer, healthier indoor environments.

Our product range is tested in accordance with the relevant EN12101 harmonised suite of standards for [smoke control compliance](#) and designed in accordance with BS7346-8 Code of Practice for planning, design, installation, commissioning, and maintenance of Smoke Control Systems.

## COMMUNICATION

Each project team incorporates dedicated project administration, coordination, and installation resources. This ensures the client receives consistency and the highest levels of customer service and delivery management throughout the project.

SE Controls worked closely with the M&E Contractor Manstal Limited to ensure the installation and commissioning were seamless throughout the project.

## BENEFITS OF THE SYSTEM

Fire safety is of major importance in any building but especially so in one like Symphony Hall, which annually is visited by thousands of concert-goers.

The Smoke Control System, is therefore seen as a life safety system and brings two key areas of benefit:

### From a safety point of view:

- Keeps public escape and access routes free from smoke.
- Improves visibility within the building allowing the fire service to facilitate operations.
- Delays and /or prevent 'flashover' and full fire development.
- Reduce the effects of heat on structural components during a fire.

### From a cost point of view:

- 40% less cable cost than a conventional system.
- Reduced installation time.
- 50% fewer devices when compared to a conventional system.

## THE FINAL WORD

**Dave Furneau, Senior Contracts Manager, Solution Sales** at SE Controls said of the project: 'The challenge facing our team was the rapidly unfolding nature of the project into which we had to integrate ourselves.

This involved liaising with the site team to ensure we worked ahead of the other site contractors in meeting our commitment in delivering and commissioning a bespoke smoke ventilation solution within the tight deadlines.

Upon completion of the project, SE Controls was able to provide a Declaration of Performance (DOP) for the complete installation, along with individual product DOPs covering the ancillary components that make up the installation. This further reinforces our commitment to providing a fully tested solution that met the exacting requirements of the client.'

He went on to add:

'We were delighted to have been involved in the latest stage in the development of this major UK arts venue. We have not only created operating efficiencies for the site but have also helped create a safe environment for Symphony Hall personnel and visitors alike.

Further information on SE Controls products, bespoke solutions, and projects may be found via e-mailing [sales@secontrols.com](mailto:sales@secontrols.com) or by calling (0)1543 443060.

SE Controls has NBS clauses and BIM Objects available on NBS Plus, BIM Object, and at <http://secontrols.com/BIM>