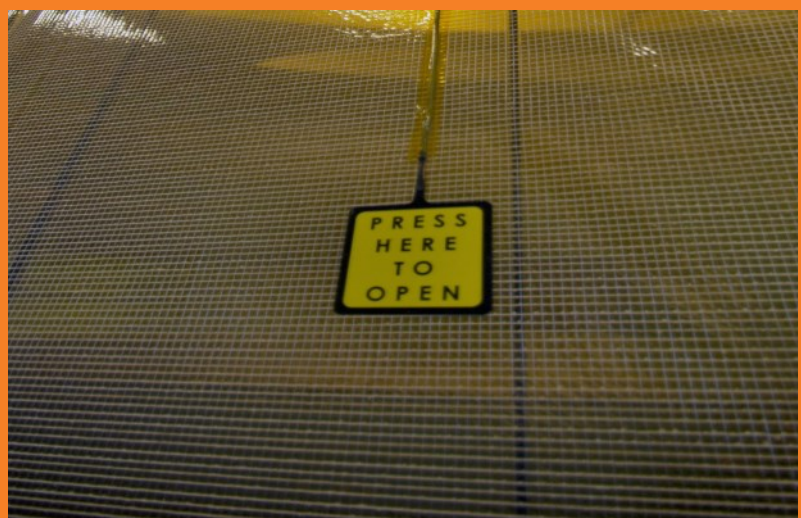


Wairakei Road

Christchurch



fire curtains • smoke containment screens • smoke curtains • horizontal fire curtains • smoke & heat release vents • natural ventilation • fire resistant glazing • horizontal glazing

Problem

Building design to maximise lettable/saleable floor space conflicts with egress requirements in the Building Code. In this case this means that a lift (smoke) lobby does not fit.

Solution

Install Smoke Guard smoke containment screens over the lift doors. Smoke Guard becomes a 'thin' lift (smoke) lobby and allows the current design to go ahead. Smoke Guard is unique, being originally designed and patented by an Architect, and allows developers to maximise their return on investment while providing strict compliance with the Building Code

Design Considerations

The system had to be highly reliable, sufficiently compact and unobtrusive during normal building use to provide for an open space design. While this project involves an exposed face fixed installation, the system can also be fully concealed above the ceiling.

On receipt of an alarm signal the Smoke Guard smoke containment screen deploys to form a smoke compartment, preventing smoke spread via the lift shaft. An unprotected lift shaft is known to provide up to 65% of vertical smoke movement in a building.

On reset of the alarm signal, Smoke Guard smoke containment screens will retract into the head box and resume "standby mode".



STANDBY

Smoke Guard is contained in a metal housing and mounted above the lift door on the lobby side of the lift shaft.



ALARM

Smoke Guard automatically deploys when smoke is detected by the smoke detector in front of the lift door or on general alarm.



DEPLOY

When deployed Smoke Guard magnetically attaches to the auxiliary rails providing a virtually air tight seal without interfering with the lift door.