



Buro Happold Specialist Consulting

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Fire safety design within retail - buying 'more' for 'less' by making informed decisions

Introduction & Background

Supermarket Modernisation

- Increased floor plate to 8,100m².
- New mezzanine floor.

Client Requires

- Easier store to manage.
- Removal of problematic smoke vents.



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Fire Strategy Outline

Means of Escape

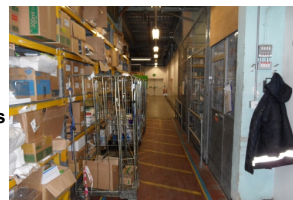
- Previously through back-of-house

New Design Code

- BS 9999: 2008

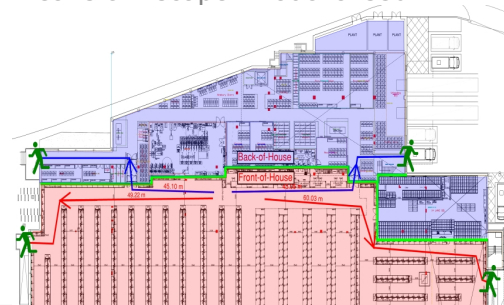
Increased Travel Distances

- up to 60m for two directions of travel



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Means of Escape - Rationalised



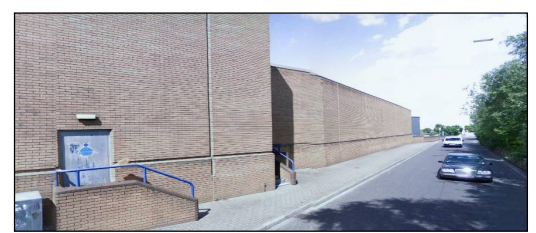
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Fire Service Access



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Fire Service Access



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Removal of Smoke Ventilation

Existing Ventilation – Problematic
Maintenance and Management – Problematic



Removal of Smoke Ventilation

Purpose – Manual Smoke clearance
Failure of system – Leaking & difficult for management to understand

Fire Service Provisions

- Excellent perimeter access, up to 90%,
- Sprinkler protected,

Store Layout

- Uniform store layout
- Higher ceiling heights

Removal of Smoke Ventilation

Store Layout

- Uniform store layout
- Higher ceiling heights



Conclusion

New Fire Safety Strategy

- Agreed with Approvers
- Removed Problematic Vents
- Justified using a qualitative straight forward argument
- Rationalised means of escape i.e. not through BOH