

## Sector Experience

### Department Stores/Retail Chains

#### Objectives >

- >Meet Building Regulation requirements including safe and efficient means of escape & fire fighting access.
- >Maximise retail space and meet the functional and architectural design requirements.
- >Minimise overdesign.

#### Our Service >

##### Performance based Fire Engineering

- >Planning of means of escape including emergency exits and exit width.
- >Optimise location of stair cores.
- >Provide specification of active and passive fire safety systems including detection & alarm, suppression and structural fire protection.



>IKEA, Ballymun, Dublin



>Dunnes Stores (Ireland & UK)

##### Egress modelling of multiple scenarios

- >Allows day-to-day and egress analysis to be adequately designed.

##### Smoke modelling

- >Assessment of both natural and mechanical strategies provided.

##### Compliance with relevant code & guidance

Where fire engineering is not required a code compliant solution is adopted. The detail needed can be extensive. Our fire strategy conveys all key requirements and specifications.

##### Fire Strategy Drawings, Fire Legislation Applications and Construction Stage Services

#### Projects >

**Brown Thomas Dublin:** MSA provided full fire engineered design, with detailed smoke modelling to allow open voids within the department store.

**IKEA, Ballymun, Dublin:** Extended travel distances and increased compartmentation sizes were analysed and shown to be compliant with the functional requirements of the Building Regulations.

**Other Projects** Marks & Spencer Dublin and Cork, Argos Retail Outlets (Nationwide), Boots Shops Dublin, Mothercare (Ireland), Halfords (Ireland), Woodies (Ireland), Champions Sports (Ireland), Ecco Shoes (Dublin), River Island (Ireland), TK Maxx (Ireland), Habitat (Dublin), Next (UK & Ireland), Smiths Toys (UK & Ireland), Tommy Hilfiger (Ireland), H&M (Ireland), Heaton's (N. Ireland), Shaws (Ireland), Coast (Ireland)

##### >Dublin Office

19 Windsor Place,  
Lower Pembroke Street,  
Dublin 2

Tel: +353 (1)6765713  
Fax: +353 (1)6785247  
Email: dublin@msa.ie

##### >Belfast Office

Scottish Mutual Building,  
Donegall Square South,  
Belfast BT1 5IG

Tel: +44(0)2890312077  
Fax: +44(0)2890312077  
Email: belfast@msa.ie

##### >Leeds Office

Calls Wharf,  
2 The Calls,  
Leeds LS2 7JU

Tel: +44 (0)113 237 2838  
Fax: +44 (0)113 237 2701  
Email: leeds@msa.ie



ACEI  
Association of Consulting  
Engineers of Ireland