



**SALES FLOOR DOOR WIDTH CALCULATION:**  
 Total ground floor area 1088 sqm  
 1088/4 = 272 Occupancy  
 5m per person x Occupancy  
 5 x 272 = 1360mm total clear exit width (TCW) required (discounting main entrance doors)  
 1360 / 2 = 680mm

- LEGEND:**
- ..... Denotes line of fire rated compartment wall taken up to underside of mezzanine and fire stopped.
  - Denotes line of fire rated compartment wall taken up to underside of soffit and fire stopped.
  - ⊗ Denotes 1hr plasterboard underdraw to first floor
  - FD00 One hour fire resistant self closing door, with intumescent strips and smoke seals.
  - FD30 Half hour fire resistant self closing door, with intumescent strips and smoke seals.
  - DH Magnetic hold open device linked to the fire alarm. Door to shut automatically in the event of a fire alarm condition.
  - FE2 CO2 fire extinguisher (2kg).
  - FE3 CO2 fire extinguisher (5kg).
  - FE6 Foam fire extinguisher.
  - FEF Wet chemical (Class F) fire extinguisher (6 Litres).
  - FB Fire blanket.

- FIRE SAFETY SIGNAGE:**
- 800x400mm internally illuminated exit sign, positioned central above exit doors. Top of sign to be underside of ceiling level.
  - 250x175mm self adhesive vinyl "Fire exit keep clear" sign, positioned central to door leaf. Centre of sign to be 1500mm above finished floor level.
  - 600x80mm self adhesive vinyl "Fire door keep shut" sign, positioned central to door leaf. Centre of sign to be 1500mm above finished floor level.
  - 200x300mm rigid plastic "Fire action" sign, screwed to wall adjacent fire exit doors. Centre of sign to be 350mm from edge of door frame and 1380mm above finished floor level.
  - 600x100mm self adhesive vinyl "Push bar to open" sign, positioned central to door leaf directly above panic bar.
  - 600x250mm self adhesive photoluminescent running man signage
  - 600x250mm self adhesive photoluminescent running man signage
  - 600x250mm self adhesive photoluminescent running man signage

**Proposed Ground Floor BWS Plan**  
 Scale: 1:100

**NOTES:**

**PROTECTION AND WARNING:**

The store is designed to be fully protected by sprinklers. The sprinkler system will be to all areas and will be compliant with BS EN 12245:2004. It will be designed to ordinary hazard 2 with the exception of the Warehouse which will be to a High Hazard Storage Category III. For details refer to M&E consultant's drawings and specifications.

The fire alarm and detection system will be designed and installed in accordance with BS 5839: Part 1:2002. For details refer to M&E consultant's drawings and specifications. Manual call points will be provided to the Sales Floor with automatic detection provided to all other areas of the store. The fire alarm system will be activated by one of the following alarm cues:

- Activation of a manual call point.
- Activation of a smoke heat detector head.
- Activation of a sprinkler protection head.

For details of emergency lighting, smoke and heat detectors refer to M&E consultant's drawings and specifications.

**COMPARTMENTATION:**

All compartment fire rated walls to be continued up to underside of roof floor deck and to be fire stopped with proprietary fire stop system, fixed in accordance with manufacturer's instructions.

All elements of the structure supporting the stability of compartment walls and floors to be fire rated to achieve at least the fire resistance of the wall or floor that it is supporting.

Celling voids to have composite cavity barriers at max. 20m c/c's.

All doors in compartment walls, including their frames, to have a fire resistance of at least the rating of the wall, and to be fitted with self-closing devices. All doors in high traffic areas to be fitted with magnetic hold open devices linked to the fire alarm and will shut automatically in the event of a fire alarm condition. For further details refer to the door schedule.

Transfer grilles within fire rated doors to be fitted with intumescent fire blocks.

All small holes, to a max 40mm diameter, in fire rated walls/ floors for services (pipes, cables etc) to be sealed with a proprietary fire sealant to achieve at least the fire resistance of the wall/ floor it is combined within. Pipe sizes over 40mm to be fitted with a proprietary sealing system to maintain the rating of the compartment wall/ floor.

All HGV ducting that passes through a compartment wall/ floor to be fitted with an internal self activating fire resisting damper, rated to at least the fire resistance of wall/ floor that it passes through, and to automatically shut in the event of a fire alarm condition. For further details refer to M&E consultant's drawings and specifications.

The canopy extract system is to be fitted with a fire damper where it passes through a compartment wall/ floor in accordance with DW173 "Standard for Kitchen Ventilation Systems". Where such a system penetrates a compartment wall/ floor the fan and ductwork shall either be:

- Fire rated to the same level as the fire compartment.
- Fan enclosed in a fire compartment and the duct fire clad to the same level of protection as the compartment.

Where electrical trunks penetrate the fire compartment it will be fitted with Rockwool for a distance of 300mm either side of the compartment.

Internal drainage pipes that pass through a compartment to be fitted with intumescent collars. All M&E service pipes to be sleeved as they penetrate a compartment wall and sleeves to be packed with Rockwool and sealed with intumescent mastic.

**FIRE EXITS AND MEANS OF ESCAPE:**

Travel distances within the Sales Floor are based on 45m in two directions. For the purpose of the Fire Strategy Plan direct distances (2/3rd of travel distance) have been used.

All fire exit doors to be fitted with 'push bar' panic release mechanisms and self adhesive emergency exit signage. Illuminated fire exit sign to be installed above all fire exit doors at 4200mm above finished floor level. All fire signage on glazed escape doors to be double sided.

Single escape doors have a structural opening of 1010mm wide, which provides a clear width opening between the door leaf and edge of frame of 800mm.

Double escape doors have a structural opening of 1810mm wide, which provides a clear width opening between the door leaves of 1000mm.

**FIRE EXTINGUISHERS:**

Fire extinguishers are to be located on the sales floor, adjacent all fire exits and escape routes, within the Warehouse area, customer/ colleagues restaurants, Bakery, Home shopping area and colleagues offices.

All fire extinguishers to be hung on timber pattresses with carrying handle approx. 1000mm above finished floor level.

Rev	Date	Description	By	PN



Asda Stores Ltd  
 The Asda Wealdstone  
 Wealdstone High Street  
 Proposed BWS Plan

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