

Product Specification

Farringdon Doorset

SPECIFICATION

The Farringdon was originally designed for platform-end and cross-passage applications, in which pressure differentials are the largest barrier to operability for trackside maintenance teams. The inclusion of a louvred vent allows for pressure equalisation upon depression of the lever handle/ push bar, which in turn reduces operability constraints. The Farringdon has been specified on many infrastructure projects, providing key performance characteristics including:

- FD240 (Fire Integrity)
- 156N (Opening Force)
- +/-2kPa (Static Pressure Fluctuations)

*All performance values are subject to product configuration



KEY FEATURES & BENEFITS

- The Farringdon provides safe protection from alternating pressure environments, whilst facilitating pressure equalisation to optimise operation.
- Equipped with a SIROCCO 550 x 550 pressure relief damper, providing 0.143m² of unobstructed airflow on actuation.
- Booth Industries' internal bevelled gear box assembly, translating rotational action into linear motion by actuating the louvre/ dampener and recoiling shoot bolts, facilitating door operation (all components manufactured by B-Tech; wholly owned subsidiary)
- Booth Industries' auto-bolt mechanism (copyright) resets the mechanical system on engagement by triggering the shoot bolt via a series of efficient linkages on closure (manufactured by B-Tech; wholly owned subsidiary).
- Removable panels within the skin construction for maintenance and inspection access to mechanical linkages. Fully bolted/ removable skin for access to entire mechanical system.
- Operational against a variable differential pressure environment of between -320Pa to +255Pa.
- Welded door leaf construction for complete peace of mind.
- 95% recyclable materials used throughout construction.
- Can be configured as an inward or outward opening door solution.
- Can be configured as LH active or RH active door solution.

FIRE RATING

The door solution was originally assessed as a stainless steel variant to FD60 (AR 376714B), however was later fire tested by WarringtonFire in accordance with BS 476-22:1987, and achieved a maximum integrity performance of 264 minutes. This significant overrun on the original FD60 requirements has given the product more flexibility in scope for dimensional increase in accordance with The Field of Direct Application Rules, and PFPF Assessment Rules for Metallic Doorsets (as described on the following page). The below table references the destructive test undertaken:

Test Reference	Structural Opening (mm)		Performance (mins)			Notes
	Height	Width	E	I ₂	I ₁	
419684 (106g)	2197	1309	264	16	-	Mild Steel variant



FD240		S/O Width (mm)								
		1309	1330.5	1352	1373.5	1395	1416.5	1438	1459.5	1481
S/O Height (mm)	2197	Y	Y	Y	Y	Y	Y	Y	Y	Y
	2236.5	Y	Y	Y	Y	Y	Y	Y	Y	Y
	2276	Y	Y	Y	Y	Y	Y	Y	Y	Y
	2315.5	Y	Y	Y	Y	Y	Y	Y	Y	N
	2355	Y	Y	Y	Y	Y	Y	Y	N	N
	2394.5	Y	Y	Y	Y	Y	Y	N	N	N
	2434	Y	Y	Y	Y	Y	N	N	N	N
	2473.5	Y	Y	Y	Y	N	N	N	N	N
	2513	Y	Y	Y	N	N	N	N	N	N

Note, the table above indicates certified structural opening (S/O) dimensions for an FD240 Farringdon doorset (Y = certified, N = un-certified). Further dimensional increases are permitted for lower fire performance requirements; please enquire with our sales team as to whether your desired configuration remains within the limits of our product certification.

SUPPORTING PERFORMANCE CAPABILITIES

Pressure Rating	+/-2kPa induced static pressure fluctuations (<i>enquire for more information</i>)
U-Value	Unknown/ Un-tested
Air Leakage	Unknown/ Un-tested
Opening Force	Panic Bar = 156N; LEO handle = 255N; Extended LEO handle = 176N.

LEAF CONSTRUCTION

Leaf Thickness	104mm
Leaf Material	2mm mild steel pressed skins (incorporating access panels) 100 x 30/50/80 x 3mm mild steel pressed stiffeners
Insulation	None
Hinge	18730 continuous piano hinge (cranked & eccentric)
Astragal	None
Lifting Points	Top centre M16 tapped lifting point, c/w hinge lifting points throughout height

FRAME CONSTRUCTION

Frame Profile	215 x 58mm "P" shaped single rebate profile with 1.2mm Zintec flashing detail
Frame Material	5mm mild steel pressed frame, w/ 5mm mild steel backing
Reinforcement	None
Construction Method	Four piece construction screwed/ bolted together
Threshold Detail	3mm x 215mm flat (low profile)

OTHER DETAILS

Finish	Polyester powder coat (PPC) and wet paint options available (<i>see SF001 datasheet</i>)
Leaf Mass	200kg/m ²
Furniture	Stainless steel panic bar, key lockable LEO module lever handle, Booths' "D" shaped pull handle, Booths' autobolt mechanism and bevelled gearbox, SIROCCO 550 x 550 pressure relief dampener.
Closers & Stays	LCN4040 tandem closers. No door stays.
Vision Panel Sizes	None
Seals	None
Supporting Structure	Brickwork, Blockwork, Concrete, Steelwork (<i>any rigid form of structure retains certification</i>)
Other Options	Earthing straps, contacts, door stops.

TYPICAL DETAILS

The key interfacing and operational details have been included below for reference. Please enquire with our sales team should you require further information on the Farrington product.

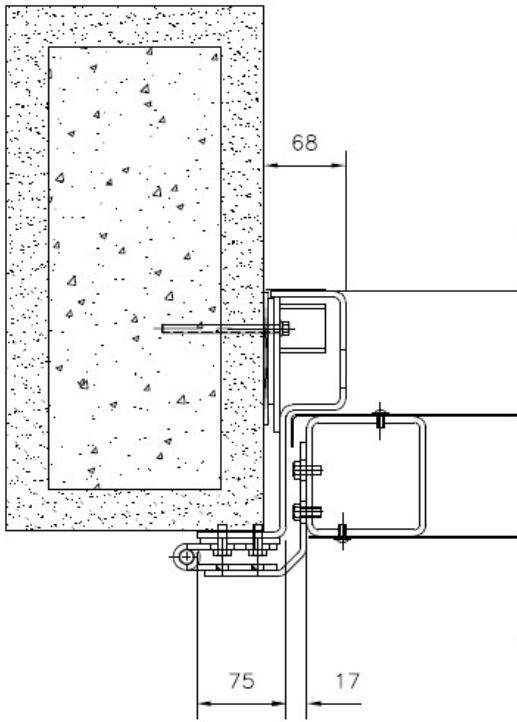


Fig. 1 – Frame Detail

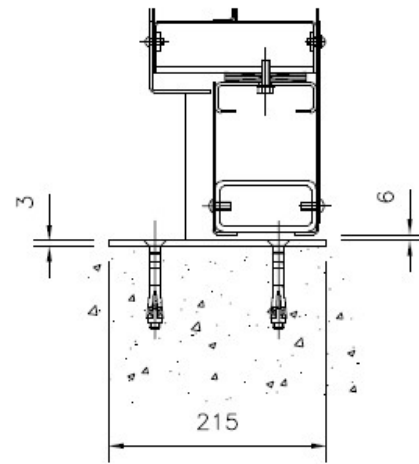
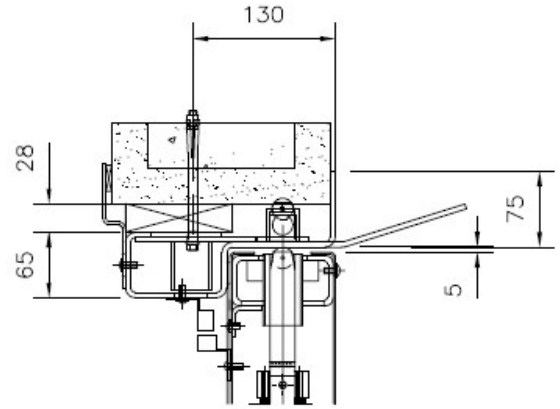


Fig. 2 – Threshold and Header Details

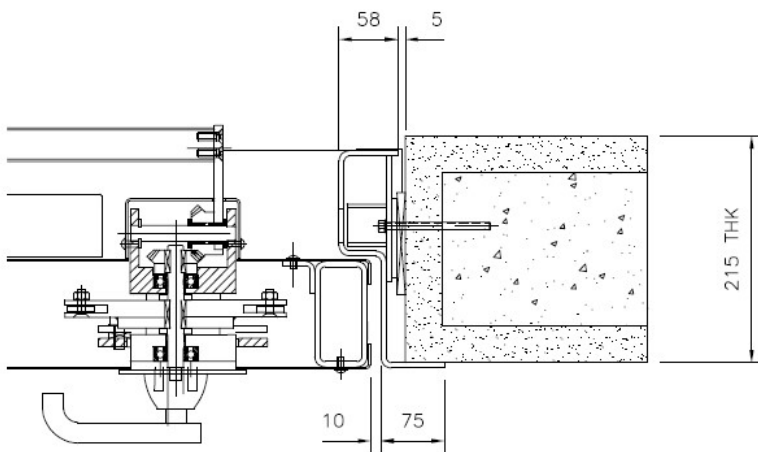


Fig. 3 – Leading Edge Detail

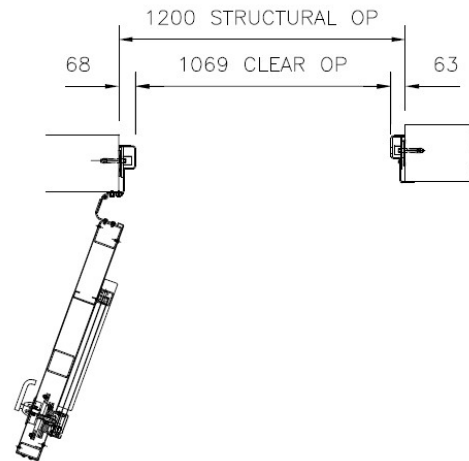


Fig. 4 – Typical Clear Opening
(S/O = 1200mm(w) @ 110°)