

Product Specification

RIV 50 Doorset

SPECIFICATION

A multi-functional personnel hinged single and double door solution specified for high-performance applications. The RIV 50 is a bespoke acoustic, fire and security door, capable of sustaining high pressures and low-level blast. Ideally specified for infrastructure, commercial and industrial projects. Key performance characteristics include:

- FD240 (Fire Integrity)
- I₂60 (Fire Insulation)
- Rw50 (Sound attenuation)
- SR3 (Security Rating)
- 32kPa (Pressure Rating)

*All performance values are subject to product configuration



KEY FEATURES & BENEFITS

- The RIV 50 series is widely renowned as the most complete door in the marketplace, providing a robust array of safety resistance against fire, pressure, acoustics, and security/ attack.
- The double rebated frame design optimises the seal arrangement which in turn maximises the acoustic performance of the product (including rebating at the meeting edge).
- The leaf build up can be configured as a cladding or panel profile, for high performance acoustic product applications.
- The insulated core provides exceptional fire insulation and thermal resistance properties.
- Welded door leaf and frame construction for complete peace of mind.
- 95% recyclable materials used throughout construction.
- Can be configured as an inward or outward opening door solution, including a 1.5 leaf option.
- Can be configured as LH active or RH active door solution.

SECURITY RATING

The base product (in the absence of an acoustic cassette), was tested by BRE and LPCB certified to LPS 1175: Issue 7 Security Rating 3 (SR3), in both HSL and HDL configurations (*certificates outstanding*). These tests form the basis of this product's security performance, and include:

- CR18189-139a - Hinged Single Leaf (HSL) Inward or Outward Opening (S/O = 2210(h) x 1650(w))
- CR18189-139b - Hinged Double Leaf (HDL) Outward Opening ONLY (S/O = 2400(h) x 3020(w))

Note:

- 1) The security rating is valid providing the tested furniture is included on the door leaf.
- 2) 1.5 leaf configurations have not been security tested so would need further validation by BRE.
- 3) Side and over panels have not been security tested so would need further validation by BRE.

ACOUSTIC RATING

Tested by dBx Acoustics Ltd in accordance with BS EN 10140-2:2010 using a 4190mm(h) x 3280mm(w) oversized sample, achieving $R_w (C;C_{tr}) = 50\text{dB} (-1;-3)$, as documented in report 16903.



FIRE RATING

The RIV 50 has undergone destructive testing from both directions at WarringtonFire against BS EN1634:2018, and has achieved a maximum integrity performance of 255 minutes:

Test Reference	Structural Opening (mm)		Performance (mins)			Notes
	Height	Width	E	I ₂	I ₁	
403541 (104a)	2590	2580	255	72	-	
407133 (104c)	2590	2580	144	45	-	

Please enquire with our sales team as to whether your desired configuration remains within the limits of our product certification (including duration), in accordance with PFPF Assessment Rules for Metallic Doorsets.

SUPPORTING PERFORMANCE CAPABILITIES

Pressure Rating	16kPa @ 1.4m leaf width; 32kPa @ 1.0m leaf width (<i>enquire for more information</i>)
Blast Resistance	Yes- subject to magnitude and period (<i>enquire for more information</i>)
U-Value	Up to 1.90W/m ² K (<i>depending on configuration</i>)
Air Leakage	Unknown/ Un-tested
Opening Force	< 100N (<i>static pressure differential and with EN7 closer mounted</i>)

LEAF CONSTRUCTION

Leaf Thickness	111mm
Leaf Material	3mm mild steel pressed skins 50 x 25 x 3mm mild steel pressed stiffeners 3mm internal manganese plate (allow 12%-14%) for security performance
Insulation	Firemaster 607, Firebatt 825, & Maxiboard 17mm
Hinges	1606 continuous piano hinges c/w dog bolts
Astragal	84 x 4mm mild steel (full height)
Lifting Points	4no. M16 Tapped Lifting Blocks per leaf (LAS-D-0213 MS)

FRAME CONSTRUCTION

Frame Profile	165mm deep double rebate profile (<i>see detail</i>)
Frame Material	3mm mild steel pressed frame, w/ 5mm mild steel backing
Reinforcement	5mm mild steel internal gussets
Construction Method	Mitre joint with 3mm square/ seam welds
Threshold Detail	80mm high double rebate profile (<i>see detail</i>) – removable option available.

OTHER DETAILS

Finish	Polyester powder coat (PPC) and wet paint options available (<i>see SF001 datasheet</i>)
Leaf Mass	150kg/m ²
Furniture	SM slimline options to suit push/ pull operation, TB barrel bolts, HD pull handle, SM GSS3R cylinder guard, and auxiliary units.
Closers & Stays	DC700A closers, and HD7000 door stay options.
Vision Panel Sizes	300mm(h) x 200mm(w) clear vision (<i>certification restrictions apply</i>)
Seals	Lorient LP1004, LP1504, LP4504, LAS3003i
Supporting Structure	Brickwork, Blockwork, Concrete, Steelwork (<i>any rigid form of structure retains certification</i>)
Other Options	Earthing straps, contacts, door stops, door selector.

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 RIV 50 product.

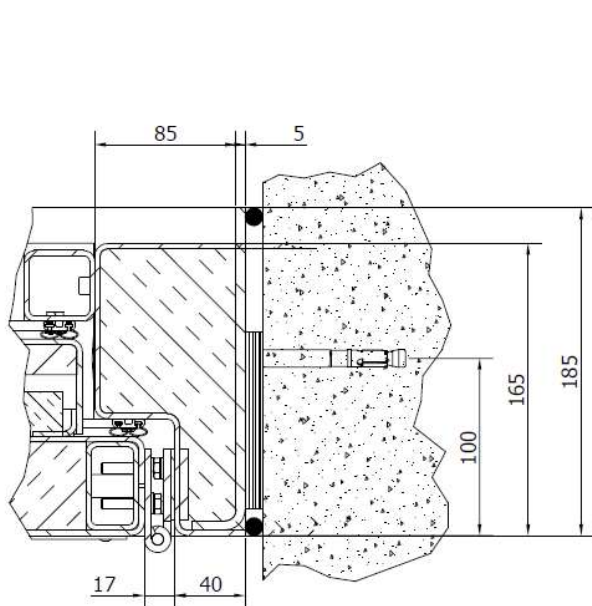


Fig. 1 – Frame Detail

CERAMIC FIBRE ROPE & INTUMESCENT MASTIC BOTH SIDES (BY BOOTH)

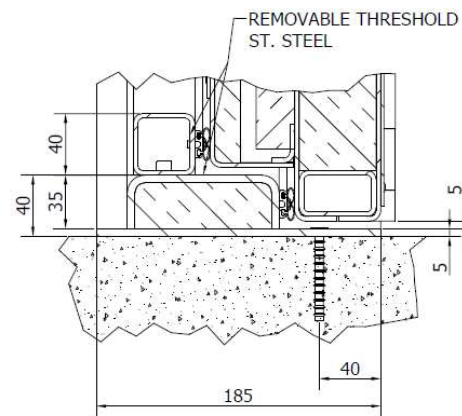
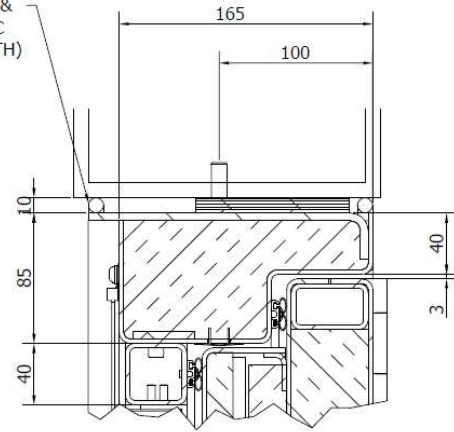


Fig. 2 – Threshold and Header Details

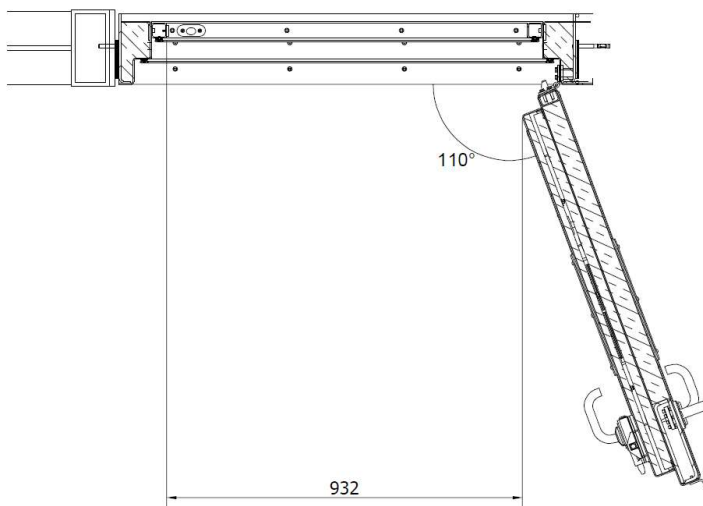


Fig. 3 – Typical Clear Opening
(S/O = 1260mm(w) @ 110° (HSL – example))

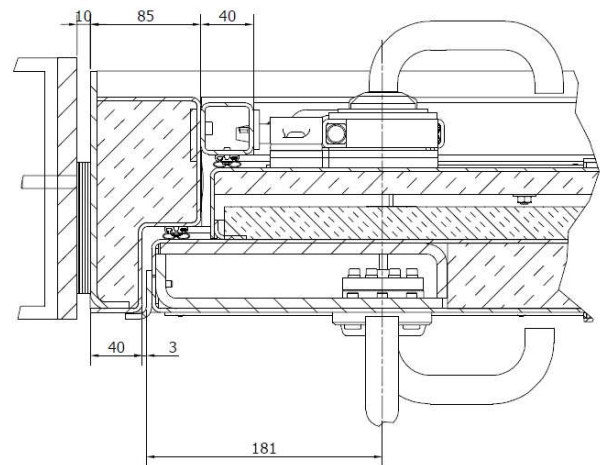


Fig. 4 – Leading Edge Detail