

Product Specification

A60 HSL Doorset

SPECIFICATION

The Booth Industries A60 HSL is a hinged single leaf door predominately specified within the offshore industry. This product, in its various forms, has been a mainstay within the Booth technical library for decades, and has more recently been modified to suit the latest revision of maritime fire test procedures. Renowned as the most robust offshore door on the market, the A60 HSL comes with the following key performance criteria:

- EI60 (Fire Integrity & Insulation)
- +/-5kPa (Static Pressure Fluctuations)
- Weathertight (for Offshore Applications)
- Mild Steel & Stainless Steel options

*All performance values are subject to product configuration



KEY FEATURES & BENEFITS

- Booths' A60 product range is acknowledged as the top performing product suite within the offshore industry, promoting endurance, safety, and quality. Booth recognises that this enhanced product quality prolongs component FMEA, and thereby minimises the inspection and maintenance requirements within dangerous environments.
- Lloyd's Register Certificate of Fire Approval reference, SAS F150197.
- Insulated core providing thermal resistance against fire for a period in excess of 60 minutes.
- Internal locking system with inspection points enabling a flush door surface finish.
- Innovative manufacturing procedure which includes drawing heat from the welding process ensuring surface flatness.
- Opening Force <80N (in the absence of differential pressure).
- Fully seam welded door leaf construction to ensuring no water ingress.
- Optimal lead times due to all parts and components being held in Booths internal stock inventory (stores).
- Full perimeter silicone seal forming a weathertight configuration for offshore applications.
- A60 HSL door leaf can be configured to a max. 2530mm(h) , and 1260mm(w), and remain within its certification limits (*subject to the definition within SAS F150197*).
- 30+ year design life

FIRE RATING

The A60 HSL has undergone a destructive fire test at WarringtonFire against IMO Resolution 307(88), and IMO MSC.1/Circ.1319, in a mild steel configuration, performing as follows:

Test Reference	Structural Opening (mm)		Performance (mins)			Notes
	Height	Width	E	I ₂	I ₁	
329328	2338	1236	71	71	-	

This test was undertaken in 2013 and at the time, discontinued at the sponsors request. This is despite the product maintaining both integrity and insulation at the termination point. The Booths Engineering team has since mathematically modelled the time at which the product would have incurred an insulation failure, and has found this to be at approximately 93 minutes. The time at which integrity would have failed is however assumed to be prior to this.

LEAF CONSTRUCTION

Leaf Thickness	85mm
Leaf Material	2mm pressed skins (CR4 or 316L) 55 x 25 x 3mm pressed stiffeners (S275 or 316L) 44 x 22 x 2mm pressed stiffeners (CR4 or 316L)
Insulation	50mm Firebatt 825, 12.5mm Glasroc F Multiboard
Hinge	3x Booth Lift-Off Hinges (ST/ST)
Astragal	None
Lifting Points	Hinge lifting points throughout height; soft slings in-situ.

FRAME CONSTRUCTION

Frame Profile	148 x 105mm "P" shaped single rebate profile (incl. bulkhead overlap)
Frame Material	4mm pressed frame, w/ seal carriers (S275 or 316L)
Reinforcement	None
Construction Method	Four piece construction fixed to bulkhead all round; square butt to top corners, dressed flush.
Threshold Detail	4mm x 148mm flat w/ 30mm flats top mounted for seal carriers.

OTHER DETAILS

Finish	C5 Wet Paint or Polished (see SF001 datasheet)
Leaf Mass	80kg/m ²
Furniture	Booths' HD Lever Handle, Booths' HD Panic Bar, 3-Point Slim Locking Latch Assembly (ST/ST).
Closers & Stays	LCN 4116 closer. No door stays.
Vision Panel Sizes	300mm x 300mm clear vision (27mm Pyrostop)
Seals	Silicon Rubber (Low Smoke)
Supporting Structure	A60 class steel bulkhead with either M12 fixings @ 300mm, or fully welded on one side min.
Other Options	None

TYPICAL DETAILS

The key interfacing and operational details have been included below for reference.

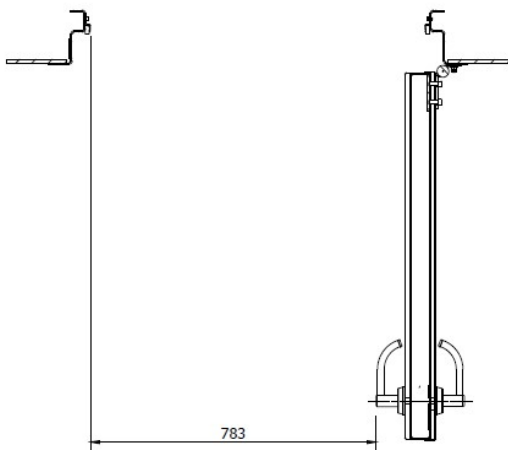


Fig. 1 – Clear Opening @ 90°

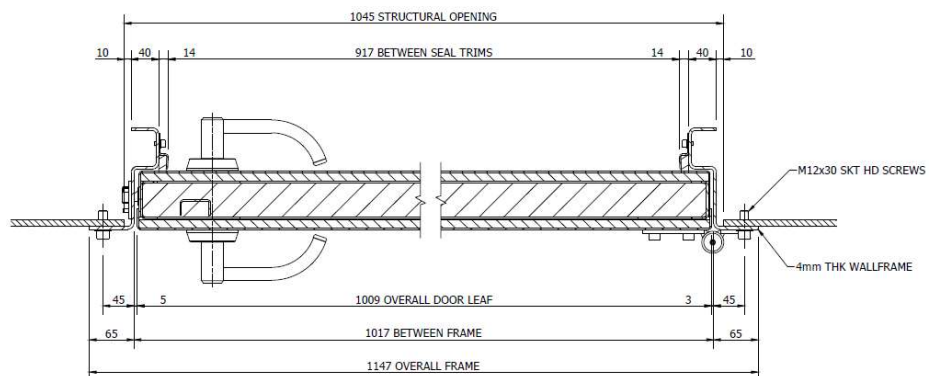


Fig. 2 – Section through the leaf

The A60 HSL can be configured in larger sizes in accordance with fire certificate SAS F150197, which facilitates wider clear openings. Please enquire with our sales team should you require further information on the A60 HSL product.