Certificate of Compliance

You have been awarded:

WH Service Mark 2014 for Category D - Door/frame Assemblies, Doors

Standards: BS 476 Part 22 (1987)

Certificate number: WHI18-28731410

This is a certificate of compliance to certify that the bearer has successfully completed the requirements of the above scheme which include the testing of products, the initial assessment, and are subject to continuing annual assessments of their compliance and testing of samples of products taken from production (as applicable to the scheme) and has been registered within the scheme for the products detailed.

Organization: ARFAD International Industry Company
Building No. 4177, Road 118, 3rd Industrial Area
Al Jubail 35729
Kingdom of Saudi Arabia

Product: Halspan 30 Optima Fire Rated Door Assembly
Spec ID: 32870
Fire Rating: 30 Minute Fire Rated
Listing Information: See following page(s)

Certification body: Intertek Testing Services NA, Inc.
Initial registration: March 13, 2018
Date of expiry: December 31, 2026
Issue status: 10

Authorized By: _____
Jean-Philippe Kayl, Director of Certification

Intertek Testing Services NA, Inc.
545 E. Algonquin Road, Ste H., Arlington Heights, IL 60005 USA
Phone: 847-439-5667 Fax: 847-439-7320

www.intertek.com

The certificate and schedule are held in force by regular annual surveillance visits by Intertek Testing Services NA, Inc. and the reader or user should contact Intertek to validate its status. This certificate remains the property of Intertek Testing Services NA, Inc. and must be returned to them on demand. This Certificate is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this certificate. Only the Client is authorized to permit copying or distribution of this certificate and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.

LISTING INFORMATION

PRODUCT COVERED

Halspan 30 Optima Particleboard Fire Door Assembly for use in fire rated applications per BS 476 Part 22 (1987) for insulation and integrity ratings as specified below.
Insulation: See the table and glazing restrictions below. Insulation rating is dependent on glazing configuration, (See Machining Information section of listing for complete approvals, restrictions, and limitations).

Type		Details
Partially Insulating		Doorsets incorporating up to 20 percent of non-insulating glazing.
Fully Insulating	Timber Frames	Unglazed doorsets or doorsets including 30 minute insulating glazing.
	Steel Frames (Back filled with concrete/mortar)	Unglazed doorsets or doorsets including 30 minute insulating glazing.

Integrity: 30 Minutes

MAXIMUM SIZES FOR DOORS WITH TIMBER FRAMES:

Doorset Configurations	Frame & Leaf Type	Maximum Size	Intumescent Spec. Reference	Make / Type	Manufacturer / Supplier	Location & Size
LSASD	Leaf 1 with Frame 1 or Leaf 1 with Frame 2 or Leaf 1 with Frame 3 or Leaf 2 with Frame 2 or Leaf 2 with Frame 3	1151mm width at 2440mm height Or 1001mm width at 2806mm height	AS18	SLS	Halspan Ltd	Head & Jambs: 1no 15x4 Fitted in frame reveal or leaf edges. 1no 25x4 Fitted 11mm from hinge knuckle in closing edge only.
		801mm width at 2040mm height Or 726mm width at 2190mm height	AS1	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4 Fitted in frame reveal or leaf edges
		982mm width at 2090mm height Or 926mm width at 2210mm height	AS3	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4 Fitted in frame reveal or leaf edges
		1014mm width at 2700mm height Or 836mm width at 3245mm height	AS2	Therm-A-Seal	Intumescent Seals Ltd	Head: 1no 20x4 Fitted in frame or leaf head. Jambs: 1no 10 x 4 fitted in frame jambs or leaf edges.
		1025mm width at 2040mm height Or 932mm width at 2244mm height	AS7	Rigid Box FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1291mm width at 2055mm height Or 912mm width at 2890mm height	AS4	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1080mm width at 2040mm height Or 926mm width at 2380mm height	AS8	Palusol 500PSA	Mann Mcgowan Fabrication Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1213mm width at 2315mm height	AS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or

		Or 916mm width at 2974mm height				leaf edges.
		1139mm width at 2040mm height Or 916mm width at 2532mm height	AS10	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		1178mm width at 2900mm height Or 1050mm width at 3195mm height	AS11	ST154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted 15mm from opening face in frame reveal or leaf edges.
		985mm width at 2040mm height Or 827mm width at 2394mm height	AS13	Palusol 100P	Mann Mcgowan Fabrication Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1067mm width at 2040mm height Or 827mm width at 2598mm height	AS14	LP1504	Lorient Polyproducts Ltd.	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
	Leaf 1 with Frame 2 or Leaf 1 with Frame 3 or Leaf 2 with Frame 2	1176mm width at 2100mm height Or 874mm width at 2815mm height	AH1	LP2004, LP1004	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Jambs: 1no 10x4 LP1004. Fitted in frame jambs or leaf edges.
		1227mm width at 2130mm height Or 915mm width at 2800mm height	AH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		1055mm width at 2040mm height Or 936mm width at 2294mm height	AH3	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 10x4. Offset intumescent – Fitted 36mm from opening face in frame reveal or leaf edges, continuous and uninterrupted by hinges.
		1203mm width at 2135mm height or 825mm width at 3068mm height	AH4	Therm-A-Seal, Therm-A-Stop, Therm-A-Flex	Intumescent Seals Ltd	Head & Jambs: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 8mm apart in frame reveal or leaf edges. The Therm-A-Seal is fitted 5mm from opening face. Leaf Bottom Edge: 1no 38x2 Therm-A-Flex. Fitted in bottom leaf edge.
		1123mm width at 2702mm height Or 915mm width at 3292mm height	AH6	LP2004, 100EC (concealed)	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Leaf Vertical Edges: 1no 30x2 100EC. Fitted into grooves in the rear face of lipping. Seal is continuous underneath hinges.
		1192mm width at 2205mm height Or 1000mm width at 2623mm height	AH7	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted 15mm from opening face in frame reveal. Partially interrupted by hinges with 2mm bypassing hinges.
		1036mm width at 2630mm height Or 901mm width at 2955mm	AH8	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.

		height				
		1155mm width at 2100mm height Or 900mm width at 2695mm height	AH9	FO8500	Pyroplex Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		866mm width at 2040mm height Or 827mm width at 2124mm height	AH10	Therm-A-Blade	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1411mm width at 2404mm height Or 1085mm width at 3125mm height	AH12	FO8700	Pyroplex Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		996mm width at 2065mm height Or 934mm width at 2203mm height	AH13	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted 18mm from opening face. Partially interrupted by hinges with 3mm bypassing hinges.
LSASD ULSASD	Leaf 1, 2 & 3 with Frame 4 or Leaf 2 with Frame 4 or Leaf 3 with Frame 4	926mm width at 2400mm height	-	Palusol 100P	Mann Mcgowan	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
LSASD	Leaf 1 with Frame 5 or Leaf 2 with Frame 5	1035mm width at 2440mm height Or 918mm width at 2734mm height	ASP1	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
LSASD	Leaf 2 with Frame 1 or Leaf 2 with Frame 2 or Leaf 2 with Frame 3	1275mm width at 2441mm height Or 1000mm width at 3101mm height	AS6	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted 20mm from hinge-knuckle face in frame reveal or leaf edges. Seal is partially interrupted by hinges.
LSASD	Leaf 2 with Frame 6	1492mm width at 2400mm height Or 1000mm width at 3400mm height	AH01	SLS Type	Halspan Ltd	Head & Jambs: 2no 15x4. Fitted 21mm and 43mm from opening face. Seal fitted at 21mm is partially interrupted by hinges with 73% bypassing hinges. Second seal is fully interrupted by hinges.
LSASD	Leaf 3 with Frame 1 or Leaf 3 with Frame 2 or Leaf 3 with Frame 3	926mm width at 2135mm height	AS12	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1074mm width at 2042mm height Or 926mm width at 2364mm height	AS16	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
LSASD	Leaf 3 with Frame 2	930mm width at 2060mm height	AH14	LP1004, LP2504	Lorient Polyproducts Ltd	Head: 1no 10x4 LP1004. Fitted in frame or leaf head. Hanging Jamb: 1no 10x4 LP1004. Fitted in hanging jamb or leaf edge. Latching Jamb: 1no 25x4 Lorient LP2504. Fitted in latching jamb.
ULSASD	Leaf 1 with Frame 1 or	776mm width at 2040mm height	BS1	LP1004	Lorient Polyproducts	Head & Jambs: 1no 10x4. Fitted in frame reveal or

	Leaf 1 with Frame 2 or Leaf 1 with Frame 3 Or Leaf 2 with Frame 1	Or 726mm width at 2140mm height			Ltd	leaf edges
		989mm width at 2700mm height Or 836mm width at 3195mm height	BS2	Therm-A-Seal	Intumescent Seals Ltd	Head: 1no 20x4. Fitted in frame or leaf head Jambs: 1no 10x4. Fitted in frame jambs or leaf edges.
		957mm width at 2090mm height Or 926mm width at 2160mm height	BS3	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1266mm width at 2055mm height Or 912mm width at 2840mm height	BS4	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1188mm width at 2315mm height Or 916mm width at 2924mm height	BS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		1114mm width at 2040mm height Or 916mm width at 2482mm height	BS10	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		1153mm width at 2900mm height Or 1050mm width at 3145mm height	BS11	ST154FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4. Fitted 15mm from opening face in frame reveal or leaf edges.
		960mm width at 2040mm height Or 827mm width at 2344mm height	BS13	Palusol 100P	Mann Mcgowan Fabrications Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
		1042mm width at 2040mm height Or 827mm width at 2548mm height	BS14	LP1504	Lorient Polyproducts Ltd.	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
ULSASD	Leaf 1 with Frame 2	1151mm width at 2100mm height Or 874mm width at 2765mm height	BH1	LP2004, LP1004	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Jambs: 1no 10x4 LP1004. Fitted in frame jambs or leaf edges.
		1202mm width at 2130mm height Or 915mm width at 2750mm height	BH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		1030mm width at 2040mm height Or 936mm width at 2244mm height	BH3	Therm-A-Seal	Intumescent Seals Ltd	Head & Jambs: 1no 10x4. Offset - Fitted 36mm from exposed face in frame reveal or leaf edges, continuous and uninterrupted by hinges.
		1178mm width at 2135mm height Or	BH4	Therm-A-Seal, Therm-	Intumescent Seals Ltd	Head & Jambs: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 8mm apart in

		825mm width at 3018mm height		A-Stop, Therm-A-Flex.		frame reveal or leaf edges. The Therm-A-Seal is fitted 5mm from exposed face. Leaf Bottom Edge: 1no 38x2 Therm-A-Flex. Fitted in bottom leaf edge.
		1098mm width at 2702mm height Or 915mm width at 3242mm height	BH6	LP2004, 100EC (concealed)	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Leaf Vertical Edges: 1no 30x2 100EC. Fitted into grooves in the rear face of lipping. Seal is continuous underneath hinges.
		1011mm width at 2630mm height Or 901mm width at 2905mm height	BH8	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges.
		841mm width at 2040mm height Or 827mm width at 2074mm height	BH10	Therm-A-Blade	Intumescent Seals Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
ULSASD	Leaf 1 with Frame 5 Or Leaf 2 with Frame 5	1010mm width at 2440mm height Or 918mm width at 2684mm height	BSP1	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges.
ULSASD	Leaf 3 with Frame 1 Or Leaf 3 with Frame 3	1049mm width at 2042mm height Or 926mm width at 2314mm height	BS16	LP1504	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4 Lorient LP1504. Fitted in frame reveal or leaf edges.
LSASD+OP	Leaf 1 with Frame 1 Or Leaf 1 with Frame 2 Or Leaf 1 with Frame 3 Or Leaf 2 with Frame 2	1132mm width at 2135mm height Or 915mm width at 2599mm height	DS5	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal and in leaf head in rebate upstand Overpanel: 1no 15x4. Fitted in rebate of bottom edge and vertical edges.
		1163mm width at 2315mm height Or 916mm width at 2874mm height	DS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in leaf head in rebate upstand. Overpanel: 1no 10x4. Fitted in rebate of bottom edge.
LSASD+OP	Leaf 1 with Frame 2	1177mm width at 2130mm height Or 915mm width at 2700mm height	DH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate in leaf head. Overpanel: 1no 10x4. Fitted in rebate in bottom edge
ULSASD+OP	Leaf 1 with Frame 1, 2, 3 Or Leaf 2 with Frame 1,	1107mm width at 2135mm height Or 915mm width at 2549mm	ES5	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal and in rebate of leaf head. Overpanel:

	2	height				1no 15x4. Fitted in rebate of bottom edge and vertical edges.
		1138mm width x 2135mm height Or 916mm width at 2824mm height	ES9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate of leaf head. Overpanel: 1no 10x4. Fitted in rebate of bottom edge.
ULSASD+OP	Leaf 1 with Frame 2	1152mm width at 2130mm height Or 915mm width at 2650mm height	EH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate in leaf head. Overpanel: 1no 10x4. Fitted in rebate in bottom edge.
LSADD	Leaf 1 with Frame 1, 2 Or Leaf 2 with frame 2 – 54mm thick leaf with hardwood frame Or Leaf 2 with frame 3 – 54mm thick leaf with MDF frame	751mm width at 2040mm height Or 726mm width at 2090mm height	GS1	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 1no 10x4. Fitted in both leaves.
		1241mm width at 2055mm height Or 912mm width at 2790mm height	GS4	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges. Meeting Edges: 1no 15x4. Fitted in slave leaf.
		1113mm width at 2135mm height Or 916mm width at 2774mm height	GS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted 10mm apart and 8mm from opening face in one leaf.
		1128mm width at 2900mm height Or 1050mm width at 3095mm height	GS11	ST154FO, ST104FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4 ST154FO. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4 ST104FO. Fitted 10mm apart and 7mm from opening face in main leaf. Both seals partially interrupted by latch forend with 4mm bypassing it.
		935mm width at 2040mm height Or 827mm width at 2294mm height	GS13	Palusol 100P	Mann Mcgowan Fabrications Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no. 10x4. Fitted 10mm apart and 7.5mm from exposed face in main leaf. Both seals partially interrupted by latch forend with 2.5mm bypassing it.
		1017mm width at 2040mm height Or 827mm width at 2498mm height	GS14	LP1504, LP1004	Lorient Polyproducts Ltd.	Head & Jambs: 1no 15x4 LP1504. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4 LP1004. Fitted 10mm apart and 7.5mm from opening face in main leaf. Both seals partially interrupted by latch forend with 2.5mm bypassing it.
		1003mm width at 2085mm height Or 850mm width at 2448mm height	GS15	Therm-A-Seal	Intumecsent Seals Ltd	Head: 1no 20x4. Fitted in frame or leaf head. Jambs: 1no 10x4. Fitted in frame jambs or leaf edges. Meeting Edges:

						1no 10x4. Fitted in both leaves.
LSADD	Leaf 1 with Frame 2 Or Leaf 2 with frame 2 – 54mm thick leaf with hardwood frame	1127mm width at 2130mm height Or 915mm width at 2600mm height	GH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted centrally and 12mm apart in one leaf.
		1153mm width at 2135mm height Or 825mm width at 2968mm height	GH4	Therm-A-Seal, Therm-A-Stop, Therm-A-Flex.	Intumescent Seals Ltd	Head & Jambs: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 8mm apart in frame reveal or leaf edges. The Therm-A-Seal fitted 5mm from opening face. Leaf Bottom Edges: 1no 38x2 Therm-A-Flex. Fitted centrally. Meeting Edges: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 5mm apart, and Therm-A-Seal fitted 5mm from opening face in one leaf.
		1004mm width at 2102mm height Or 877mm width at 2397mm height	GH5	LP2004, LP1004	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Jambs: 1no 10x4 LP1004. Fitted in jamb reveal or leaf edges. Meeting Edges: 2no 10x4 LP1004. Fitted centrally and 8mm apart in one leaf.
		1167mm width at 2205mm height Or 1000mm width at 2573mm height	GH7	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges. Partially interrupted by hinges with 2mm bypassing hinges. Meeting Edges: 1no 10x4. Fitted 18mm from exposed face in both leaves.
		986mm width at 2630mm height Or 901mm width at 2855mm height	GH8	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted centrally and 10mm apart in one leaf.
		1181mm width at 2404mm height Or 984mm width at 2885mm height	GH11	FO8700, FO8500	Pyroplex Ltd	Head & Jambs: 1no 15x4 FO8700. Fitted in leaf edges or frame reveal. Meeting Edges: 2no 10x4 FO8500. Fitted 8mm apart in one leaf. One seal partially interrupted by latch keep with 3mm bypassing it. flushbolt body partially interrupts both seals with 2mm bypassing it.
LSADD	Leaf 2 with Frame 1 Or Leaf1 with Frame 1 Or Leaf 2 with frame 2 – 54mm thick leaf with hardwood frame Or Leaf 2 with frame 3 – 54mm thick leaf with MDF frame	1250mm width at 2441mm height Or 1000mm width at 3051mm height	GS6	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted 20mm from hinge-knuckle face in frame reveal or leaf edges. Partially interrupted by hinges Meeting Edges: 2no 10x4. Fitted in main leaf. Partially interrupted by latch forend.

LSADD	Leaf 2 with Frame 6	1467mm width at 2400mm height Or 1000mm width at 3400mm height	GHO1	SLS Type	Halspan Ltd	Head & Jambs: 2no 15x4. Fitted 21mm and 43mm from exposed face in frame reveal or leaf edges. Seal fitted at 21mm is partially interrupted by hinges with 73% bypassing it. Meeting Edges: 2no 15x4. Fitted 4mm and 26mm from exposed face in one leaf. Seal fitted at 4mm is partially interrupted by flushbolts with 80% bypassing it. Second seal is partially interrupted by latch keep and flushbolts with 13% and 33% bypassing them respectively
LSADD	Leaf 3 with Frame 1, 2, 3	951mm width at 2042mm height Or 926mm width at 2092mm height	GS17	LP1504, LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4 Lorient LP1504. Fitted in frame reveal or leaf edges. Meeting Edges: 1no 10 x 4 Lorient LP1004 fitted 5mm from the exposed face in the main leaf, 1no 10 x 4 Lorient LP1004 fitted to the slave leaf 5mm from the unexposed face.
ULSADD	Leaf 1 with Frame 1, 2, 3 Or Leaf 2 with Frame 1 Or Leaf 2 with Frame 2 – 54mm thick leaf with hardwood frame or Leaf 2 with Frame 3 – 54mm thick leaf with MDF frame	726mm width at 2040mm height	HS1	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 1no 10x4. Fitted in both leaves.
		1216mm width at 2055mm height Or 912mm width at 2740mm height	HS4	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges. Meeting Edges: 1no 15x4. Fitted in slave leaf.
		1088mm width at 2315mm height Or 916mm width at 2724mm height	HS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted 10mm apart and 8mm from opening face in one leaf.
		1103mm width at 2900mm height Or 1050mm width at 3045mm height	HS11	ST1504FO, ST1004FO	Sealed Tight Solutions Ltd	Head & Jambs: 1no 15x4 ST1504FO. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4 ST1004FO. Fitted 10mm apart and 7mm from opening face in main leaf. Both seals partially interrupted by latch forend with 4mm bypassing latch forend.
		910mm width at 2040mm height Or 827mm width at 2244mm height	HS13	Palusol 100P	Mann Mcgowan Fabrications Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no. 10x4. Fitted 10mm apart and 7.5mm from exposed face in main leaf. Both seals partially interrupted by latch forend with 2.5mm bypassing latch forend.
		992mm width at 2040mm height Or 827mm width at 2448mm height	HS14	LP1504, LP1004	Lorient Polyproducts Ltd.	Head & Jambs: 1no 15x4 LP1504. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4 LP1004. Fitted 10mm apart and 7.5mm from opening face in main leaf. Both seals partially

						interrupted by latch forend with 2.5mm bypassing latch forend.
		978mm width at 2085mm height Or 850mm width at 2398mm height	HS15	Therm-A-Seal	Intumecsent Seals Ltd	Head: 1no 20x4. Fitted in frame or leaf head. Jambs: 1no 10x4. Fitted in frame jambs or leaf edges. Meeting Edges: 1no 10x4. Fitted in both leaves.
ULSADD	Leaf 1 with Frame 2 Or Leaf 2 with Frame 2 – 54mm thick leaf with hardwood frame	1102mm width at 2130mm height Or 915mm width at 2550mm height	HH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted centrally and 12mm apart in one leaf.
		1128mm width at 2135mm height Or 825mm width at 2918mm height	HH4	Therm-A-Seal, Therm-A-Stop, Therm-A-Flex.	Intumescent Seals Ltd	Head & Jambs: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 8mm apart in frame reveal or leaf edges. The Therm-A-Seal fitted 5mm from opening face. Leaf Bottom Edges: 1no 38x2 Therm-A-Flex. Fitted centrally. Meeting Edges: 1no 20x4 Therm-A-Stop & 1no 10x4 Therm-A-Seal. Fitted 5mm apart, and Therm-A-Seal fitted 5mm from opening face in one leaf.
		979mm width at 2102mm height Or 877mm width at 2347mm height	HH5	LP2004, LP1004	Lorient Polyproducts Ltd	Head: 1no 20x4 LP2004. Fitted in frame or leaf head. Jambs: 1no 10x4 LP1004. Fitted in jamb reveal or leaf edges. Meeting Edges: 2no 10x4 LP1004. Fitted centrally and 8mm apart in one leaf.
		961mm width at 2630mm height Or 901mm width at 2805mm height	HH8	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4. Fitted centrally and 10mm apart in one leaf.
ULSADD	Leaf 3 with Frame 1, 2, 3	926mm width at 2042mm height	HS17	LP1504, LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 15x4 Lorient LP1504. Fitted in frame reveal or leaf edges. Meeting Edges: 2no 10x4 Lorient LP1004. 1no in each leaf fitted 5mm offset from centre, uninterrupted in both leaves.
LSADD+OP	Leaf 1 with Frame 1, 2, 3 Or Leaf 2 with Frame 1 Or Leaf 2 with Frame 2 – 54mm thick leaf in a hardwood frame Or Leaf 2 with Frame 3 – 54mm thick leaf in a MDF frame	1032mm width at 2135mm height Or 915mm width at 2399mm height	JS5	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges: 1no 15x4. Fitted in one leaf edge. Overpanel: 1no 15x4. Fitted in rebate of bottom edge and vertical edges.
		1063mm width at 2315mm height Or 916mm width at 2674mm	JS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges:

		height				2no 10x4. Fitted 10mm apart and 8mm from exposed face in one leaf only. Overpanel: 1no 10x4. Fitted in rebate of bottom edge.
LSADD+OP	Leaf 1 with Frame 2 Or Leaf 2 with Frame 2 – 54mm thick leaf in a hardwood frame	1077mm width at 2130mm height Or 915mm width at 2500mm height	JH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges: 2no 10x4. Fitted centrally and 12mm apart in the meeting edge of one leaf. Overpanel: 1no 10x4. Fitted in rebate in bottom edge.
ULSADD+OP	Leaf 1 with Frame 1, 2, 3 Or Leaf 2 with Frame 2 – 54mm thick leaf in a hardwood frame Or Leaf 2 with Frame 3 – 54mm thick leaf in a MDF frame	1007mm width at 2135mm height Or 915mm width at 2349mm height	KS5	SLS Type	Halspan Ltd	Head & Jambs: 1no 15x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges: 1no 15x4. Fitted in one leaf edge. Overpanel: 1no 15x4. Fitted in rebate of bottom edge and vertical edges.
		1038mm width at 2315mm height Or 915mm width at 2624mm height	KS9	SLS Type	Halspan Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges: 2no 10x4. Fitted 10mm apart and 8mm from opening face in one leaf only. Overpanel: 1no 10x4. Fitted in rebate of bottom edge.
ULSADD+OP	Leaf 1 with Frame 2 Or Leaf 2 with Frame 2 – 54mm thick leaf in a hardwood frame	1052mm width at 2130mm height Or 915mm width at 2450mm height	KH2	LP1004	Lorient Polyproducts Ltd	Head & Jambs: 1no 10x4. Fitted in frame reveal and in rebate of leaf head. Meeting Edges: 2no 10x4. Fitted centrally and 12mm apart in the meeting edge of one leaf. Overpanel: 1no 10x4. Fitted in rebate in bottom edge

Door Leaf:
Leaf 1: Optima 30 (44mm core)
Leaf 2: Optima 30 (54mm core)
Leaf 3: Optima 30 (44mm core – Bond up)
Door Frames:
Frame 1: Softwood or Hardwood Timber
Frame 2: Hardwood Timber
Frame 3: MDF
Frame 4: Morland Firecheck
Frame 5: Projecting Softwood, MDF or Hardwood Timber
Frame 6: Over Rebated Hardwood Timber

MAXIMUM SIZES FOR DOORS WITH STEEL OR ALUMINIM FRAMES:

Doorset Configurations	Frame & Leaf Type	Maximum Size	Intumescent Spec. Reference	Make / Type	Manufacturer / Supplier	Location & Size
LSASD	Leaf 1 with Frame M1, M2, M3, M4, & M5	1605mm width at 2135mm height Or 1105mm width at 3135mm	AM1/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20 x4. Fitted in leaf edges

		height				
		1228mm width at 2135mm height Or 914mm width at 2861mm height	AM3/1	Therm-A-Seal, Therm-A-Stop & Therm-A-Flex	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No. 20x4 Therm-A-Stop & 10x4 Therm-A-Seal. Fitted 3mm apart and the Therm-A-Seal located 5mm from flush face leaf edge. **Bottom Edge:** 1No. 38x2 Therm-A-Flex. Fitted in leaf edge.
		1075mm width at 2438mm height Or 1000mm width at 2610mm height	AM4/1	H30	Halspan Ltd	**Head & Vertical Edges:** 1No. 30x6. Fitted in leaf edge.
		1066 mm width at 2042mm height Or 826 mm width at 2600mm height	AM3/2	Therm-A Flex & LP2004	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Vertical Edges:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted on top of each other in leaf edge.
		938mm width at 2700mm height Or 835mm width at 2940mm height	AM5/1	Therm-A Seal	Intumescent Seals Ltd	**Head:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Vertical Edges:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edge.
		1109mm width at 2135mm height Or 916mm width at 2576mm height	AM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
LSASD	Leaf 2 with Frame M1, M3, & M4	1605mm width at 2135mm height Or 1105mm width at 3135mm height	AM1/2 & AM1/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4 or 38 x 4 Fitted in leaf edges
		1228mm width at 2135mm height Or 914mm width at 2861mm height	AM3/1	Therm-ASeal, Therm-AStop & Therm-AFlex	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No. 20x4 Therm-A-Stop & 10x4 Therm-A-Seal. Fitted 3mm apart and the Therm-A-Seal located 5mm from flush face leaf edge. **Bottom Edge:** 1No. 38x2 Therm-A-Flex. Fitted in leaf edge.
		1075mm width at 2438mm height Or 1000mm width at 2610mm height	AM4/1	H30	Halspan Ltd	**Head & Vertical Edges:** 1No. 30x6. Fitted in leaf edge.
		1173mm width at 2850mm height Or 928mm width at 3523mm height	AM4/2	H60	Halspan Ltd	**Head & Vertical Edges:** 1No. 36x6. Fitted on top of each other in leaf edge.
		1066mm width at 2042mm height Or 826mm width at 2600mm height	AM3/2	Therm-AFlex & LP2004	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Vertical Edges:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted on top of each other in leaf edge.
		938mm width at 2700mm height Or 835mm width at 2940mm	AM5/1	Therm-A Seal	Intumescent Seals Ltd	**Head:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Vertical Edges:**

		height				1No. 20x4 Therm-A-Seal. Fitted in leaf edge.
		1374mm width at 2850mm height Or 926mm width at 3850mm height	AM4/3	H60	Halspan Ltd	**Head & Vertical Edges:** 1No. 38x6. Fitted in leaf edge.
		1109mm width at 2135mm height Or 916mm width at 2576mm height	AM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
LSASD	Leaf 3 with Frame M2	1109mm width at 2135mm height Or 916mm width at 2576mm height	AM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
ULSASD	Leaf 1 with Frame M1, M2, M3, & M5	1605mm width at 2135mm height or 1105mm width at 3131mm height	BM1/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
		1203mm width at 2135mm height Or 914mm width at 2811mm height	BM3/1	Therm-ASeal, Therm-AStop & Therm-AFlex	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No. 20x4 Therm-A-Stop & 10x4 Therm-A-Seal. Fitted 3mm apart and the Therm-A-Seal located 5mm from flush face leaf edge. **Bottom Edge:** 1No. 38x2 Therm-A-Flex. Fitted in leaf edge.
		1041mm width at 2042mm height Or 826mm width at 2550mm height	BM3/2	Therm-AFlex & LP2004	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Vertical Edges:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted on top of each other in leaf edge.
		913mm width at 2700mm height Or 835mm width at 2890mm height	BM5/1	Therm-A Seal	Intumescent Seals Ltd	**Head:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Vertical Edges:** 1No. 20x4 Therm-A-Seal. Fitted on top of each other in leaf edge.
		1084mm width at 2135mm height Or 916mm width at 2526mm height	BM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges**: 1No 20x4. Fitted in leaf edges
ULSASD	Leaf 2 with Frame M1, M2, M3, M4 & M5	1605mm width at 2135mm height Or 1105mm width at 3135mm height	BM1/2 & BM1/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges**: 1No 20x4 or 38 X 4 Fitted in leaf edges
		1203mm width at 2135mm height Or 914mm width at 2811mm height	BM3/1	Therm-ASeal, Therm-AStop & Therm-AFlex	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No. 20x4 Therm-A-Stop & 10x4 Therm-A-Seal. Fitted 3mm apart and the Therm-A-Seal located 5mm from flush face leaf edge. **Bottom Edge:** 1No. 38x2 Therm-A-Flex. Fitted in leaf edge.
		1148mm width at 2850mm height Or	BM4/2	H60	Halspan Ltd	**Head & Vertical Edges:** 1No. 36x6. Fitted in leaf edge.

		928mm width at 3473mm height				
		1041mm width at 2042mm height Or 826mm width at 2550mm height	BM3/2	Therm-AFlex & LP2004	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Vertical Edges:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted on top of each other in leaf edge.
		913mm width at 2700mm height Or 835mm width at 2890mm height	BM5/1	Therm-A Seal	Intumescent Seals Ltd	Head: 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Vertical Edges:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edge.
		1084mm width at 2135mm height Or 916mm width at 2526mm height	BM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
ULSASD	Leaf 3 with Frame M2	1084mm width at 2135mm height Or 916mm width at 2526mm height	BM2/1	Therm-A Seal	Intumescent Seals Ltd	**Head & Vertical Edges:** 1No 20x4. Fitted in leaf edges
LSASD+OP	Leaf 2 with Frame M4	1142mm width at 2194mm height Or 926mm width at 2706mm height	DM4/2	H60	Halspan Ltd	**Head & Vertical Edges:** 1No 38x6. Fitted in leaf and overpanel edges.
LSADD	Leaf 1 with Frame M1, M3, M4 & M5	932mm width at 2135mm height Or 800mm width at 2470mm height	GM1/3	Therm-ASeal & Therm-AStop	Intumescent Seals Ltd	**Head & Hanging Edge:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edges **Meeting Edge:** 2No. 10x4 Therm-A-Seal & Therm-AStop. Fitted 10mm apart in one leaf.
		1050mm width at 2438mm height Or 1000mm width at 2560mm height	GM4/4	H30 & SLS-PLA-100 & SLS-TWF-100	Halspan Ltd	**Head & Hanging Edge:** 1No. 30x6 H30. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 SLS-PLA-100 & SLS-TWA- 100. Fitted 9mm apart in one leaf. 1No. 10x4 SLS-PLA-100. Fitted in opposite leaf.
		1016mm width at 2042mm height Or 826mm width at 2500mm height	GM3/3	Therm-AFlex & LP2004 & Therm-AStop & Therm-ASeal	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Hanging Edge:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted in leaf edge. **Meeting Edge:** 1No. 20x4 Therm-A-Stop & 1No. 10x4 Therm-A-Seal. Fitted with the Therm-A-Seal 5mm from the flush side of the leaf and 8mm apart in leaf housing lock.
		888mm width at 2700mm height Or 835mm width at 2840mm height	GM5/3	Therm-A Seal	Intumescent Seals Ltd	**head:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edge. **Hanging Edge:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 Therm-A-Seal. Fitted 10mm apart in leaf edge.

LSADD	Leaf 2 with Frame M1, M3, M4 & M5	1218mm width at 2145mm height Or 795mm width at 3145mm height	GM1/4	Therm-ASeal & Therm-AStop	Intumescent Seals Ltd	**Head & Hanging Edges:** 1No 38x4. Fitted in leaf edges **Meeting Edge:** 2No. 10x4 Therm-A-Seal. Fitted 10mm apart in the leaf housing the latch and 1No. 10x4 Therm-A-Stop fitted in opposite leaf.
		1050mm width at 2438mm Height Or 1000mm width at 2560mm height	GM4/4	H30 & SLS-PLA-100 & SLS-TWF-100	Halspan Ltd	**Head & Hanging Edge:** 1No. 30x6 H30. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 SLS-PLA-100 & SLS-TWA- 100. Fitted 9mm apart in one leaf. 1No. 10x4 SLS-PLA-100. Fitted in opposite leaf.
		1123mm width at 2850mm height Or 928mm width at 3423mm height	GM4/5	H60 & SLS-PLA-100 & SLS-TWF-100	Halspan Ltd	**Head & Vertical Edges:** 1No. 36x6. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 SLS-PLA-100 & SLS-TWA- 100. Fitted 8mm apart in the leaf housing the lock. 1No. 10x4 SLS-PLA- 100. Fitted in opposite leaf.
		1016mm width at 2042mm height Or 826mm width at 2500mm height	GM3/3	Therm-AFlex & LP2004 & Therm-AStop & Therm-ASeal	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Hanging Edge:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted in leaf edge. **Meeting Edge:** 1No. 20x4 Therm-A-Stop & 1No. 10x4 Therm-A-Seal. Fitted with the Therm-A-Seal 5mm from the flush side of the leaf and 8mm apart in leaf housing lock
		888mm width at 2700mm height Or 835mm width at 2840mm height	GM5/3	Therm-A-Seal	Intumescent Seals Ltd	**Head:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edge. Hanging **Edge:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 Therm-A-Seal. Fitted 10mm apart in leaf edge housing latch.
ULSADD	Leaf 1 with Frame M1, M3 & M5	907mm width at 2135mm height Or 800mm width at 2420mm height	HM1/3	Therm-ASeal & Therm-AStop	Intumescent Seals Ltd	**Head & Hanging Edge:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edges **Meeting Edge:** 2No. 10x4 Therm-A-Seal & Therm-AStop. Fitted 10mm apart in one leaf. If flush bolts are fitted then seals must be fitted in the opposite leaf.
		991mm width at 2042mm height Or 826mm width at 2450mm height	HM3/3	Therm-AFlex & LP2004 & Therm-AStop & Therm-ASeal	Intumescent Seals Ltd & Lorient Polyproducts Ltd	Head & Hanging Edge: 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted in leaf edge. Meeting Edge: 1No. Therm-A-Seal 20x4. Fitted in one leaf if no flush bolts are fitted. 1No. 20x4 Therm-A-Stop & 1No. 10x4 Therm-A-Seal. Fitted with the Therm-A-Seal 5mm from the flush side of the leaf and 8mm apart in leaf without flush bolts.
		863mm width at 2700mm height	HM5/3	Therm-A-Seal	Intumescent Seals Ltd	**Head:** 1No. 20x4 Therm-A-Seal. Fitted in

		Or 835mm width at 2790mm height				leaf edge. **Hanging Edge:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 Therm-A-Seal. Fitted 10mm apart in one leaf edge. If flush bolts are fitted then seals must be fitted in the opposite leaf.
ULSADD	Leaf 2 with Frame M1, M3, M4 & M5	1193mm width at 2145mm height Or 795mm width at 3145mm height	HM1/4	Therm-ASeal & Therm-AStop	Intumescent Seals Ltd	**Head & Hanging Edges:** 1No 38x4. Fitted in leaf edges **Meeting Edge:** 2No. 10x4 Therm-A-Seal & Therm-AStop. Fitted 10mm apart in one leaf. If flush bolts are fitted then seals must be fitted in the opposite leaf.
		1098mm width at 2850mm height Or 928mm width at 3373mm height	HM4/5	H60 & SLS-PLA-100 & SLS-TWF-100	Halspan Ltd	**Head & Vertical Edges:** 1No. 36x6. Fitted in leaf edge. **Meeting Edge:** 2No. 10x4 SLS-PLA-100 & SLS-TWA- 100. Fitted 8mm apart in one leaf. 1No. 10x4 SLS-PLA-100. Fitted in opposite leaf.
		991mm width at 2042mm height Or 826mm width at 2450mm height	HM3/3	Therm-AFlex & LP2004 & Therm-AStop & Therm-ASeal	Intumescent Seals Ltd & Lorient Polyproducts Ltd	**Head & Hanging Edge:** 1No. 20x2 Therm-A-Flex and 20x4 LP2004. Fitted in leaf edge. **Meeting Edge:** 1No. Therm-A-Seal 20x4. Fitted in one leaf if no flush bolts are fitted. 1No. 20x4 Therm-A-Stop & 1No. 10x4 Therm-A-Seal. Fitted with the Therm-A-Seal 5mm from the flush side of the leaf and 8mm apart in leaf without flush bolts.
		863mm width at 2700mm height Or 835mm width at 2790mm height	HM5/3	Therm-ASeal	Intumescent Seals Ltd	**Head:** 1No. 20x4 Therm-A-Seal. Fitted in leaf edge. **Hanging Edge:** 1No. 30x4 Therm-A-Seal. Fitted in leaf edge. Meeting Edge: 2No. 10x4 Therm-A-Seal. Fitted 10mm apart in one leaf edge. If flush bolts are fitted then seals must be fitted in the opposite leaf.

Door Leaf:
Leaf 1: Optima 30 (44mm core)
Leaf 2: Optima 30 (54mm core)
Leaf 3: Optima 30 (44mm core – Bond up)
Door Frames:
M1: One part steel wrap around or flush frame with cement backfill and single rebate
M2: One part steel flush or wrap around cement backfill frame and double rebate
M3: One part steel hollow or backfilled with cement frame wrapped around one side of the wall only
M4: Two-part steel hollow wrap around frame
M5: Aluminium frame with sapele timber insert including integral stop and steel FM trim architrave

DEFINITION KEY
LSASD - Latched Single Acting Single Doorset
ULSASD - Unlatched Single Acting Single Doorset
DASD - Double Acting Single Doorset

LSASD+OP - Latched Single Acting Single Doorset with Overpanel
ULSASD+OP - Unlatched Single Acting Single Doorset with Overpanel
DASD+OP - Double Acting Single Doorset with Overpanel
LSADD - Latched Single Acting Double Doorset
ULSADD - Unlatched Single Acting Double Doorset
DADD - Double Acting Double Doorset
LSADD+OP - Latched Single Acting Double Doorset with Overpanel
ULSADD+OP - Unlatched Single Acting Double Doorset with Overpanel
DADD + OP - Double Acting Double Doorset + Overpanel

Please consult Intertek or Halspan with any questions that pertain to the door construction referenced within this listing.