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Initial Type-Testing Report for EC Declaration of Conformity for Industrial Door

SP Swedish National Testing and Research Institute has as Notified Body no. 0402, performed Initial type-testing of the products mentioned below, and our report may be used as support for an EC Declaration of Conformity according to the requirements in the harmonized standard EN 13241-1:2003.

Issued for Manufacturer/Factory

OSA Door Parts Ltd., Unit 4, Ashville Way, Ashville Ind Estate, WA7 3EZ Sutton Weaver
Runcorn Cheshire, Great-Britain

Product name and description

Industrial door type	OSA Door NL, HL, VL, FTR, FLH-CE, FHL, LHR-CE
Weight of doors, max	700 kg
Day-light max, width x height	8500 x 7000 mm
Day-light tested, width x height	4000 x 3500 mm
Type of panels	Tecsedo, Kingspan, Bremet
Hardware	Flexi-Force Vertical angle code 9VB, 9K 2" straight tracks code 2V Side seal code 1085, 1094-40 Top seal code 1036-36, 1036, 1036-52 3" straight track code 13155 2" rollers code 574-60, 575-100, 584-60, 585-60 3" roller code 579-11-198, 578-12-198
Machinery/ Operator	See chapter 3 in this report
Balancing system	Torsion springs
Spring break device	Flexi-Force type 670, 675 and 675-5/4
Cable break device	Flexi-Force type 440HD, 440-3, 440-600, 440LHR, 440REGL and 444
Safety edge	See chapter 3 in this report

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1 Test of fully assembled Door

1.1 Wind Load

Test report SP No. P403429, dated Aug 26, 2005

Door panel type	Wind load Class	Maximum pressure [Pa]
Tecsedo covered t=40 mm	3	-
Kingspan covered t=40 mm	3	-
Kingspan covered t=80 mm	4	-
Kingspan (Ward) covered t=80 mm with 4 windows	4	-
Bremet Monowall covered	3	-
Bremet Monowall with windows	2	-
Bremet Monowall with pass door	1	-
Bremet Monowall with windows, cylinder lock and handle/footplate 1	3	-
Bremet Monowall with windows, cylinder lock and handle/footplate 2	3	-

1.2 Determination of air permeability

Test report SP No. P403429, dated Aug 26, 2005

Door panel type	Air permeability class
Tecsedo covered t=40 mm	3
Kingspan covered t=40 mm	2
Kingspan covered t=80 mm	4
Kingspan (Ward) covered t=80 mm with 4 windows	4
Bremet Monowall covered	4
Bremet Monowall with windows	3
Bremet Monowall with pass door	2
Bremet Monowall with windows, cylinder lock and handle/footplate 1	3
Bremet Monowall with windows, cylinder lock and handle/footplate 2	3

1.3 Resistance to water penetration

Test report SP No. P403429, dated Aug 26, 2005

Door panel type	Water penetration class	Maximum pressure [Pa]
Tecsedo covered t=40 mm	1	-
Kingspan covered t=40 mm	3	150
Kingspan covered t=80 mm	3	110
Kingspan (Ward) covered t=80 mm with 4 windows	3	110
Bremet Monowall covered	3	70
Bremet Monowall with all windows FF No. 2400-90	0	-
Bremet Monowall with pass door	0	-
Bremet Monowall with:		
window no. 2380	0	-
window no. 2390	0	-
window no. 2400-90	0	-
window no. 2445	0	-
window no. 2397	0	-
cylinder lock no. 637	0	-
handle/footplate no. 640T	0	-
handle/footplate no. 642BL	3	70
Bremet Monowall with:		
window no. 2400-90	2	-
window no. 2397	0	-
cylinder lock no. 637	0	-
handle/footplate no. 640T	3	70

1.4 Thermal resistance

Test report SP No. P403429, dated Aug 26, 2005

Door panel type	Thermal transmittance, W/(m²K)					
	p	pw	pd	pwd	g	gd
Tecsedo	0.8	0.9	1.0	1.0	-	-
Kingspan, Nouveau 510, 600	0.9	1.0	1.0	1.1	-	-
Kingspan, Industrial 500, 600	0.9	1.0	1.0	1.1	-	-
Kingspan, t=80 mm	0.54	-	-	-	-	-
Bremet, Secuwall	1.1	1.1	1.2	1.2	-	-
Bremet, Monowall	0.8	0.9	0.9	1.0	-	-

p = door with covered panels only
pw = covered panels with windows
pd = covered panels with a pass door

pwd = covered panels with windows and a pass door
g = fully glazed door
gd = glazed door with a pass door

1.5 Operating forces, Safe opening, Dangerous substances and Durability of water tightness, thermal resistance and air permeability

Product	Requirement	Result	Test Report
Industrial door	Operating forces *	Pass	SP No. P403429, dated Aug 26, 2005
	Safe opening (Door weight 400 kg, 550 kg, 700 kg)	Pass	
	Dangerous substances	Pass	
	Durability of water tightness, thermal resistance and air permeability	Pass	TNO 2005-BCS-R0014, dated Jan 11, 2005

* See different operators, chapter 3 in this report.

2. Single panel test, resistance to wind load

Test report SP No. P403429, dated Aug 26, 2005

Door panel type	Width [mm]	Height [mm]	Wind load class [Pa]		Maximum pressure [Pa]
Tecsedo 40 mm					
	4040	610	5	1020	1403
4 windows	4000	610	2	-	819
	6000	610	2	-	623
6 windows	6000	610	0	-	404
reinforcement profile 65S	7500	610	2	-	810
reinforcement profile 110S	8500	610	3	-	1018
7 windows, reinforcement profile 65S	7500	610	1	-	560
8 windows, reinforcement profile 110S	8525	610	2	-	829
Kingspan 40 mm					
fingersafe	4000	610	3	-	1278
fingersafe, 4 windows	4000	610	2	-	662
fingersafe	6000	610	1	-	599
fingersafe, 6 windows	6000	610	0	-	298
fingersafe, reinforcement profile 65S	7500	610	2	-	786
fingersafe, reinforcement profile 110S	8500	610	3	-	994
fingersafe, 7 windows, reinforcement profile 65S	7500	610	1	-	557
fingersafe, 8 windows, reinforcement profile 110S	8500	610	2	-	798

Table continued.

Door panel type	Width [mm]	Height [mm]	Wind load class	Wind load [Pa]	Maximum pressure [Pa]
Bremet 40 mm					
non-fingersafe	4000	610	5	1075	1477
non-fingersafe, 4 windows	4000	610	2	-	842
non-fingersafe	6000	610	2	-	630
non-fingersafe, 6 windows	6000	610	0	-	314
non-fingersafe, reinforcement profile 65S	7500	610	2	-	766
non-fingersafe, reinforcement profile 110S	8500	610	3	-	976
non-fingersafe, 7 windows, reinforcement profile 65S	7500	610	1	-	536
non-fingersafe, 8 windows, reinforcement profile 110S	8525	610	2	-	793

Test report SP No. P403429 J, dated Oct 11, 2005

Door panel type	Width [mm]	Height [mm]	Wind load class	Wind load [Pa]	Maximum pressure [Pa]
Bremet Secuwall					
fingersafe	4000	500	5	1100	1504
fingersafe, with 4 windows	4000	500	1	-	448
fingersafe	6000	500	2	-	709
fingersafe, with 6 windows	6000	500	0	-	191
fingersafe	7500	500	1	-	448
fingersafe, with reinforcement profile 113 mm	7500	500	4	-	1399
fingersafe	8500	500	0	-	345
fingersafe, with reinforcement profile 113 mm	8500	500	3	-	1116

3. Operating forces

The operators were tested together with the test doors using FlexiForce vertical lift track system, different control units and safety edges. The configurations are shown in the following tables.

All following operators performed in accordance with the requirements, see test report SP No. P403429, dated August 26, 2005.

3.1 MFZ operators

Door Weight	Machinery	Control unit/ Sensor	Safety edge	Speed [mm/s]
700 kg	MFZ MDF2-17	AS1.3/ OS12	Flexiforce 1039-95	~265
700 kg	MFZ MDF2-17	AS1.3/ OS12	MFZ P2	~198
700 kg	MFZ MDF2-17	AS1.3/ OS12	MFZ P6	~265
700 kg	MFZ SA-0,37-20	AS1.3/ OS12	Flexiforce 1039-52	~223
700 kg	MFZ SA-0,37-20	AS1.3/ OS12	Flexiforce 1039-95	~312
700 kg	MFZ SA-0,37-20	AS1.3/ OS12	MFZ P2	~233
700 kg	MFZ SA-0,37-20	AS1.3/ OS12	MFZ P6	~312
700 kg	MFZ SAC-0,37-20	AS2.1/ OS12	Flexiforce 1039-52	~163
700 kg	MFZ SAC-0,37-20	AS2.1/ OS12	Flexiforce 1039-55	~163
700 kg	MFZ SAC-0,37-20	AS2.1/ OS12	MFZ P2	~233
700 kg	MFZ STA-0,37-20	AS1.3/ OS12	Flexiforce 1039-52	~233
700 kg	MFZ STA-0,37-20	AS1.3/ OS12	Flexiforce 1039-55	~233
700 kg	MFZ STA-0,37-20	AS1.3/ OS12	Flexiforce 1039-95	~312
700 kg	MFZ STA-0,37-20	AS1.3/ OS12	MFZ P2	~233
700 kg	MFZ STA-0,37-20	AS1.3/ OS12	MFZ P6	~312
700 kg	MFZ STA-0,37-20	NM1/ OS12	Flexiforce 1039-52	~233
700 kg	MFZ STA-0,37-20	NM1/ OS12	Flexiforce 1039-55	~223
700 kg	MFZ STA-0,37-20	NM1/ OS12	Flexiforce 1039-95	~312
700 kg	MFZ STA-0,37-20	NM1/ OS12	MFZ P2	~233
700 kg	MFZ STA-0,37-20	NM1/ OS12	MFZ P6	~312

3.2 Ovitor operators

Door Weight	Machinery	Control unit/ Sensor	Safety edge	Speed [mm/s]
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-52	~196
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-55	~201
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-95	~332
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Witt OSE	Fraba P2575010605	~256
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Witt OSE	Fraba P259000	~256
700 kg	Ovitor TVR5Z7M/OS120	Ovitor STA1.1/ Ovitor DW	Ovitor MesvacM600 DRWG1-1329-0-10-00-04	~223
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Witt OSE	Flexiforce 1039-52	~201
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Witt OSE	Flexiforce 1039-55	~201
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Witt OSE	Flexiforce 1039-95	~344
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Witt OSE	Fraba P2575010605	~256
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Witt OSE	Fraba P259000	~256
700 kg	Ovitor TVR5Z7M/OS120	Ovitor EU2/ Ovitor DW	Ovitor MesvacM600 DRWG1-1329-0-10-00-04	~234
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-52	~201
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-55	~223
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Witt OSE	Flexiforce 1039-95	~344
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Witt OSE	Fraba P2575010605	~256
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Witt OSE	Fraba P259000	~256
550 kg	Ovitor KVR5M/OS100	Ovitor STA1.1/ Ovitor DW	Ovitor MesvacM600 DRWG1-1329-0-10-00-04	~234
550 kg	Ovitor KVR5M/OS100	Ovitor EU2/ Witt OSE	Flexiforce 1039-52	~212
550 kg	Ovitor KVR5M/OS100	Ovitor EU2/ Witt OSE	Flexiforce 1039-55	~234
550 kg	Ovitor KVR5M/OS100	Ovitor EU2/ Witt OSE	Flexiforce 1039-95	~344
550 kg	Ovitor KVR5M/OS100	Ovitor EU2/ Witt OSE	Fraba P2575010605	~256
550 kg	Ovitor KVR5M/OS100	Ovitor EU2/ Witt OSE	Fraba P259000	~256
550 kg	Ovitor KVR5M/OS100	Ovitor EU2 / Ovitor DW	Ovitor MesvacM600 DRWG1-1329-0-10-00-04	~234

4 Miscellaneous

This report is a revision and replaces the earlier report with the same number dated Nov 16, 2005. The revision of this report includes, except minor editorial changes, the following changes/additions:

- Page 1; lay-out changed, door types added and more detailed information about the hardware etc is given.
- Chapter 1.4; Kingspan, t=80 mm is added in the table.
- Chapter 2; Panels Bremet Secuwall were added
- Chapter 3; 'Bottom seal rubber' corrected to 'Safety edge'.

SP Technical Research Institute of Sweden Certification



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