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

SP Technical Research Institute of Sweden has as Notified Body no. 0402, performed Initial Type-Testing of the products mentioned below according to the requirements in the harmonized standard **EN 13241-1:2003**. This report may be used as support for an EC Declaration of Conformity in accordance with the Construction Products Directive CPD, 89/106/EEC.

Issued for Manufacturer/Factory

Door-System Kft., Almakerék u. 4, 1044 Budapest, Hungary

Product name and description

Industrial door type	REWLEX NL, HL, VL, FTR, FLH-CE, FHL, LHR-CE
Weight of door, max	700 kg
Day-light max	width 8500; height 7000 mm
Day-light tested	width 4000; height 3500 mm
Panel manufacturer	Ryterna, Metecno Door Panel
Hardware Flexi-Force	2” tracks, code 2V <ul style="list-style-type: none">- rollers 2” code 574-60, 575-100, 584-60, 585-60- vertical angle code 9VB, 9K- side seal code 1085, 1094-40- top seal code 1036-36, 1036, 1036-52 3” tracks, code 13155 and 13236 <ul style="list-style-type: none">- rollers 3” code 579-11-198, 578-12-198- vertical angle code 9VB, 9K- side seal code 1085, 1094-40- top seal code 1036-36, 1036, 1036-52
Machinery/ Operator	See chapter 3 in this report
Balancing system	Torsion springs
Spring break device Flexi-Force	Type 670, 675 and 675-5/4 (see also chapter 1.5)
Cable break device Flexi-Force	2” type: 440-600, 440LHR, 440REGL, 444, 440HD 3” type: 440-3 (see also chapter 1.5)
Safety edge	See chapter 3 in this report

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1 Test of fully assembled Door

1.1 Wind Load

Door panel type	Wind load Class	Maximum pressure [Pa]	Test report SP No, date
Ryterna covered t=40 mm	4	-	P403429, 2005-08-26
Metecno Door Panel Monowall covered	3	-	P403429, 2005-08-26
Metecno Door Panel Monowall with windows	2	-	P403429, 2005-08-26
Metecno Door Panel Monowall with pass door	1	-	P403429, 2005-08-26
Metecno Door Panel Monowall with windows, cylinder lock and handle/footplate 1	3	-	P403429, 2005-08-26
Metecno Door Panel Monowall with windows, cylinder lock and handle/footplate 2	3	-	P403429, 2005-08-26

1.2 Determination of air permeability

Door panel type	Air permeability Class	Test report SP No, date
Ryterna covered t=40 mm	3	P403429, 2005-08-26
Metecno Door Panel Monowall covered	4	P403429, 2005-08-26
Metecno Door Panel Monowall with windows	3	P403429, 2005-08-26
Metecno Door Panel Monowall with pass door	2	P403429, 2005-08-26
Metecno Door Panel Monowall with windows, cylinder lock and handle/footplate 1	3	P403429, 2005-08-26
Metecno Door Panel Monowall with windows, cylinder lock and handle/footplate 2	3	P403429, 2005-08-26

1.3 Resistance to water penetration

Door panel type	Water penetration class	Maximum pressure [Pa]	Test report SP No, date
Ryterna covered t=40 mm	3	90	P403429, 2005-08-26
Metecno Door Panel Monowall covered	3	70	P403429, 2005-08-26
Metecno Door Panel Monowall with all windows FF No. 2400-90	0	-	P403429, 2005-08-26
Metecno Door Panel Monowall with pass door	0	-	P403429, 2005-08-26
Metecno Door Panel Monowall with:			P403429, 2005-08-26
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	

Table continues on next page

Chapter 1.3, Table continued

Door panel type	Water penetration class	Maximum pressure [Pa]	Test report SP No, date
Metecno Door Panel Monowall with: window no. 2400-90 window no. 2397 cylinder lock no. 637 handle/footplate no. 640T	2 0 0 3	- - - 70	P403429, 2005-08-26

1.4 Thermal resistance

Door panel type	Thermal transmittance [W/(m ² K)]					
	p	pw	pd	pwd	g	gd
Metecno Door Panel, Secuwall 1)	1.1	1.1	1.2	1.2	-	-
Metecno Door Panel, Monowall 1)	0.8	0.9	0.9	1.0	-	-
Ryterna 1)	1.2	1.3	1.3	1.4	-	-

p = door with covered panels only
 pw = covered panels with windows
 pd = covered panels with a pass door
 1) Test report SP No. P403429, 2005-08-26

pwd = covered panels with windows and a pass door
 g = fully glazed door (full vision)
 gd = glazed door with a pass door

1.5 Safe opening

Component (FF = Flexi-Force)	Door weight	Test report SP No, date
Spring break device FF type 670, 675 and 675-5/4 (225 kg each)	---	P403429, 2005-08-26
Cable break device 2" FF type: 444	400 kg	P602685B, 2006-06-21
Cable break device 2" FF type: 440-600, 440LHR, 440REGL, 440HD 3" FF type: 440-3	750 kg	P403429, 2005-08-26
Cable break device 3" FF type: 440HD	960 kg	P403429, 2005-08-26

1.6 Dangerous substances

Requirement	Result	Test Report, dated
Dangerous substances	Pass	SP No. P403429, 2005-08-26

1.7 Durability of water tightness, thermal resistance and air permeability

Requirement	Result	Test Report, dated
Durability of water tightness, thermal resistance and air permeability	Pass	TNO 2005-BCS-R0014, Jan 11, 2005 (TNO Built Environment and Geosciences, The Netherlands)

2. Single panel test, resistance to wind load

Door panel type Ryterna 40 mm (SP No. P403429, 2005-08-26)	Width [mm]	Height [mm]	Wind load		Maximum pressure [Pa]
			Class	[Pa]	
40 mm	4000	610	5	1461	2009
4 windows	4000	610	2	-	841
40 mm	6000	610	2	-	757
6 windows	6000	610	1	-	422
reinforcement profile 65S	7500	610	2	-	882
reinforcement profile 110S	8500	610	3	-	1234
7 windows, reinforcement profile 65S	7500	610	2	-	654
8 windows, reinforcement profile 110S	8525	610	3	-	1009

Door panel type Metecno Door Panel 40 mm	Width [mm]	Height [mm]	Wind load		Maximum pressure [Pa]
			Class	[Pa]	
Monowall (SP No. P403429, 2005-08-26)					
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
Secuwall (SP No. P403429 J, 2005-10-11)					
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, reinforcement profile 113 mm	7500	500	4	-	1399
fingersafe	8500	500	0	-	345
fingersafe, reinforcement profile 113 mm	8500	500	3	-	1116

3. Operating forces

The operators were tested together with the test doors using Flexi-Force vertical lift track systems, different control units and safety edges. The operators performed in accordance with the requirements according to test report SP No. P403429, dated 2005-08-26. The configurations are shown in the following table.

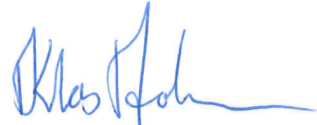
3.1 Nice operators

Door Weight	Machinery	Control unit // Sensor	Safety edge	Speed [mm/s]
568 kg	Nice SU 2000	Nice A924 // Nice TCE	Nice TCB65	~186
550 kg	Nice SU 2000	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-52	~178
550 kg	Nice SU 2000	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-55	~178
550 kg	Nice SU 2000	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-95	~250
550 kg	Nice SU 2000	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Fraba P259000	~186
330 kg	Nice SU 2000V	Nice A924 // Nice TCE	Nice TCB65	~227
330 kg	Nice SU 2000V	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-52	~197
330 kg	Nice SU 2000V	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-55	~197
330 kg	Nice SU 2000V	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Flexiforce 1039-95	~367
330 kg	Nice SU 2000V	Nice A924 // Fraba OSE-Fraba interface OSE-D-C	Fraba P259000	~227

**SP Technical Research Institute of Sweden
Certification**



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