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# Expert's report No. 45-22/21

**Fundamentals** 

DIN EN 1627-1630:2011-09, RC3 Test-/ Summary report 45-2121

**Applicant** 

dormakaba Deutschland GmbH **DORMA Platz 1** D-58256 Ennepetal

Product

ST PRO Green RC3

As an extension of the above mentioned fundamentals the following components/versions

Construction

(1-leaf and 2-leaf sliding door system with and without fixed side elements as well as with and without multi-part fixed glazed fanlight)

Element dimensions (Specified in table)

(Wall installation profile 325536 with clips profile 325546, wall installation profile 325578)

Filling (P5A glazing)

will be approved. The otherwise identical construction of the burglar-resistance element is a prerequisite.

Date of expert's report

26. November 2021

Volume of expert's report

- 1 Page cover,
- 4 Pages expert's report,
- 16 Pages annexes

Additional conditions regarding this expert's report

The expert's report is valid as long as the testingbase and/or the tested products are not changed. It is not allowed to modify or partially publish the expert's report.

Signature

State-certified technical engineer Laboratory management

State-certified technical engineer

Verifier

Institutsleitung: Andrea Horsthemke (B.Eng.)



## Technical assessment

In addition to the 1-leaf and 2-leaf sliding door system with fixed side elements and fanlights described in the test-/ and summary report 45-21/21 the constructions and nonconformities are approved by this expert's report:

#### Construction

Compared to the tested sliding door systems, all constructions approved from the table below according to annex page 1 to 10. Based on the determined results of the tests and after review of the documentation, it can be assumed that the different constructions do not have a negative influence on the static and dynamic load and also not on the manual tool attack.

Tested constructions	Approved constructions by expert's report
Automatic sliding door system, 2-leaf with fixed glazed side panels and three-part fixed glazed fanlight as passageway installation	Version of elements as 1-leaf and 2-leaf sliding door systems optionally
Burglar-resistant automatic sliding door system, 1-leaf without side panels as wall mounting	with and without fixed glazed side panels (on one- or both sides)
	with and without fixed glazed fanlights (two- to four-part)
e e	with and without horizontal bars (provided that the connection to the frame profiles corresponds to the tested condition of the frame corner connection)
	with drive heights 100 mm and 150 mm
	Installation carried out as wall mounting and passageway mounting
	Installation in mullion-transom constructions, tested as burglar-resistant component of resistance class RC 3 or higher with position of the profiles / screw connections in the mullion or transom area



### **Element dimensions**

Deviating from the element dimensions shown in the test- and summary report are approved element dimensions of the table below according to annex page 11. Based on the determined results of the tests and after review of the documentation, it can be assumed that the different sizes do not have a negative influence on the static and dynamic load and also not on the manual tool attack.

Tested element dimensions	Approved element dimensions by expert's report
2-leaf with leaf dimensions	2-leaf automatic sliding door system with the leaf dimensions
1408,5 width and 2798 mm height or 683 width and 2798 mm height	558,50 mm to 1558,50 mm width
as passage installation	2048 mm to 3098 mm height
as passage marananen	25 (5 mm to 55 / 5 mm noigm
	with the side panel dimensions
	598,50 mm to 1600 mm width
	2060 mm to 3110 mm height
	with the fanlight sizes up to 3146 mm width up to 1500 mm height
· ·	(depending on the manufacturability of the glasses)
1-leaf with leaf dimensions	System dimensions 1000 mm to 3000 mm clear width
	2050 mm to 3100 clear height
	2197 mm to 6200 mm total system width
	(Tested construction joints and dimensions of the locking points from the corners (+10% / -20 %) measured to the middle of the locking point must be observed.)
	Maximum leaf weight per moving leaf 200 kg
817 x 2798 mm for wall mounting	1-leaf automatic sliding door system
	with the leaf dimensions
	767 mm to 3067 mm width
	2048 mm to 3098 mm height
	with the side panel dimensions 807 mm to 3079 mm width
	2060 mm to 3110 mm height
	with the fanlight sizes
	up to 3146 mm width
	up to 1500 mm height
	(depending on the manufacturability of the glasses)



Tested element dimensions	Approved element dimensions by expert's report
1-leaf with leaf dimensions	System dimensions
817 x 2798 mm for wall mounting	700 mm to 3000 mm clear width
	2050 mm to 3100 mm clear height
	1628 mm to 6200 mm total system width
	(Tested construction joints and dimensions of the locking points
	measured from the corners (+10% / -20 %) to the middle of the locking
	point must be observed. For clear opening widths >1500 mm with
	3rd carriage on centre of moving leaf)
	Maximum leaf weight
	250 kg

#### Hardware

Compared to the tested hardware are approved the hardware from the table below. Based on the determined results of the tests and after review of the documentation, it can be assumed that the different hardware do not have a negative influence on the static and dynamic load and also not on the manual tool attack.

Tested hardware	Approved hardware by expert's report
multitronic 881 multipoint locking system with 5	multitronic 881 multipoint locking with
swivel hooks (type 5-00-794-02)	5 swivel hooks (type 5-00-794-02)
of the company CARL FUHR GmbH & Co. KG	of the company CARL FUHR GmbH & Co.
	KG with
Striking base plate 25715302150	hand operated release dormakaba item no.
Lock case 25813301650	258133 with tubular frame mortise lock 299
Hook bar 32556600120	and profile cylinder according to
Guide rail 32543101120	DIN 18252:2006-12 (Class 21-, 31, 71-BZ)
Anti-lift device 25819400140	and
of the company dormakaba Deutschland	hand operated release via bowden cable
GmbH	dormakaba item no. 258200
	min. 2 anti-lift devices per moving leaf
	(1 piece per carriage)

#### **Profile versions**

In addition to the tested profiles of the profile system dormakaba ST PRO Green, the profile versions from the table below according to annex 12 to 16 will be also approved by this expert's report. Based on the determined results of the tests and after review of the documentation, it can be assumed that the different profiles and types of wood do not have a negative influence on the static and dynamic load and also not on the manual tool attack.

Tested profile versions	Approved profile versions by expert's report
2-leaf with lateral structural connection of fixed elements side part and fanlight with wall connection profile 325536 in conjunction with clip profile 325546	Version with the following profiles for the structural connection of the fixed elements side part and fanlight:
	Wall connection profile 325536 in combination with clip profile 325546 or wall connection profile one-piece 325578



## **Fillings**

All fillings approved according to the table below by this expert's report. Based on the determined results of the tests and after review of the documentation, it can be assumed that the alternative fillings do not have a negative influence on the static and dynamic load and also not on the manual tool attack.

Tested fillings	Approved fillings by expert's report
3-fold insulating glass GEWE-therm, VSG	All P5A 2-fold insulating glazing with a glass
8,76 – SZR 14 – ESG 5 – SZR 14 – ESG 5	thickness of 34 mm (34,28 mm) with a
	verification in class P5A according to
3-fold insulating glass HERO-TOP S, VSG P5A	EN 356
11mm – SZR 12 – ESG 6 – SZR 12 – ESG 6	
P5A 2-fold insulating glass GEWE-safe – VSG P5A 10,28 – SZR 12 – ESG 6 – SZR 12 – ESG 6	All P5A 3-fold insulating glazing with a glass thickness of 46 mm to 50 mm (46,28 mm to 50,28 mm) with a verification in class P5A according to EN 356
Fully bonded all around with Sikaflex-221	Fully bonded all around with Sikaflex-221

## **Applicable conditions**

The identical construction of the elements, as described in the above named fundamentals are required.

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#### **Annexes**

Page 1 to page 16

D-42551 Velbert, 26. November 2021