Test Report No. 106 25128/1e*)



*) This test report is a translation of Test Report No. 106 25128/1 dated 21 August 2002.

Date of report	26 July 2005
Client	SUNFLEX Aluminiumsysteme GmbH Im Ruttenberge 12 Industriegebiet "Auf der Mark"
	D-57482 Wenden-Gerlingen
Order	Test of mechanical durability (Repeated opening and closing)
Object	Balcony glazing, system " SUNFLEX SF 25 SD " Frame material aluminium
Contents	 Definition of task Object Procedure Results Guidance on the use of ift-test reports





1 Definition of task

The company SUNFLEX Aluminiumsysteme GmbH, D-57482 Wenden-Gerlingen, commissioned the **ift** Rosenheim, to test the durability (repeated opening and closing) of the specimen described and illustrated (cross section) in Annex 1.

2 Object

Selection of test specimen	By the client	
Test specimen delivered on	14 November 2001	
Test specimen	Balcony glazing	
Product name/ system	SUNFLEX SF 25 SD	
Frame		
Frame material	Aluminium	
Slide rails	Top profile No. SF250009, with height adjustment SF250011 bottom profile No. SF250010	
Exterior dimensions	2405 mm x 1680 mm	
Glazing beads	Profile No. SF250009, with cover plate SF250007	
Exterior dimensions	790 mm x 1497 mm	
Rebate configuration		
Drainage	See representation of the test specimen	
Hardware		
Mode of operation	Sliding / side-hung	
Туре	Proprietary hardware	
Number of hinges/bearings 2 at top and bottom each per casement		
Locks	At top of side-hung casement spring-loaded latch that engages into guide rail and is released with a cord. At bottom, additional sliding bolt engaging into neighbouring casement. The sliding bolt was opened during the test.	
Fillings		
Glazing	Single safety glass 10 mm	
Fixing of glass pane	2 M8 screw connections each at bottom and top, see Annex 1	

Details on test specimen, e.g. profiles, gaskets, glazing, drainage and ventilation systems, are given in the sectional illustrations (Annex 1).



2.1 Representation of the test specimen

Examination of structural details was based exclusively on the characteristics to be tested. The drawings were prepared by the client.

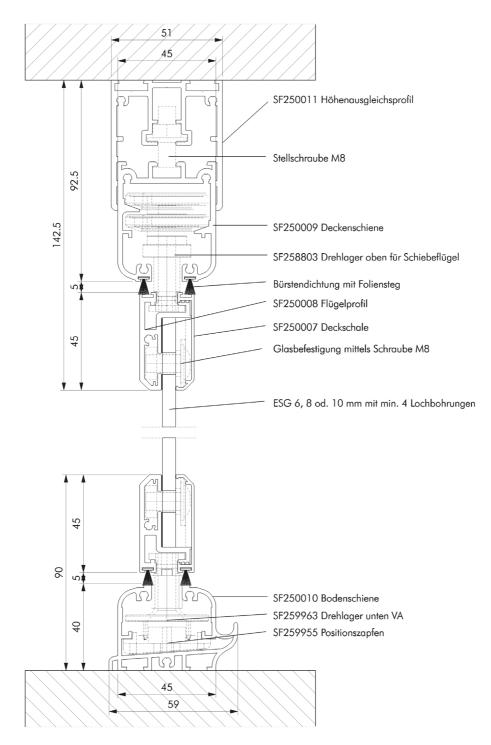


Fig. 1 Sectional drawings of the test specimen



3 Procedure

3.1 Sampling

The test specimens were selected by the client.

Number	1
Delivered on	14 November 2002 by the client
Number of registration	11125

3.2 Methods

Basis	
EN 1191 : 2000-08	Windows and doors - Resistance to repeated opening and closing - Test method
prEN 12400 : 2002-04	Windows and pedestrian doors - Mechanical durability - Requirements and classification
Boundary conditions	As set out by the standards
Deviation	The test was limited to opening and unlocking the hinged casement up to a distance of approx. 15 cm, followed by closing the casement with engagement of the lock. There have been no deviations from the test method and/or the test conditions.

3.3 Test performed

Date/Period	3 June 2002 until 7 June 2002

by Mr. Eder

4 Results

Resistance to repeated opening and closing

The test specimen was exposed to 10.000 cycles (opening and closing). No malfunctions were observed.

Classification as per prEN 12400: 1996-07

Class 2

Design and quality of workmanship were not evaluated.



4.1 Validity of test results

The values given in this test report refer exclusively to the tested item described in Section 2.

4.2 Transfer of test results

The measured results were obtained from the test specimen in new condition. Consequently they do not cover any changes that are likely to be caused by the effects of aging and/or weathering.

The test results can be extrapolated to identical or smaller dimensions of the same design and type of attachment, provided that consistent quality of workmanship is ensured by suitable control measures and the materials used and the design/make correspond to the description of the present test report.

5 Guidance on the use of ift-test reports

The **ift**-Guidance Sheet "Conditions and Guidance for the Use of **ift** Test Documents" applies.

ift Rosenheim

26 July 2005

i. *Y.* Jörn Peter Lass, Dipl.-Ing. (FH) Head of Testing Department **ift** Centre for Windows and Facades

/B&:

i. A. Markus Egli, Dipl.-Ing. (FH) Test engineer ift Centre for Windows and Facades