



Structural / Mechanical Tests

(Hinge Endurance, Vertical Load and Impact)
to BS EN 947:1999, BS EN 949:1999 and BS 7352:1990

Summary of Performance

Document No. LS90 / EVI

Ls90 Partitioning System Doorset

This is to confirm that with 3 No. steel lift off hinges (582) on a 838mm wide x 2650mm high doorset construction of the above partitioning system as detailed in The Building Test Centre Report No. **BTC 10827S** and **BTC 12722S** in conjunction with evidence contained in ASSA testing Laboratory PC-Teknik Report No T891 (available on request) and **summarised overleaf** has been tested in accordance to British / European Standards BS EN 947: 1999, BS EN 949: 1999 and BS 7352: 1990 and achieved the following performance grades;

Type of Test	Category of Duty
Hinge Endurance	Grade 9
Vertical Load	Severe
Soft Heavy Body Impact	Severe

Note

The mechanical stability tests conducted under BS EN 947 and BS EN 949 were originally designed to assess a doorset installed within a building structural wall. There is currently no defined test variation for installations in non loadbearing partition walls. The use of these tests demonstrate the conformity of the doorset when installed to a structural wall and the variation when installed in the more flexible partitioning system.

For performance validation of the installed product this Summary of Performance must be accompanied by the signed Contractors Statement



Certificate No FM25967

National Specifier Support Line Tel: 0871 781 2700 ♦ E-mail: tech@komfort.com ♦ Internet: www.komfort.com

Ls90 Partitioning System

Doorset Hinge Endurance, Vertical Load & Impact

Summary of Results



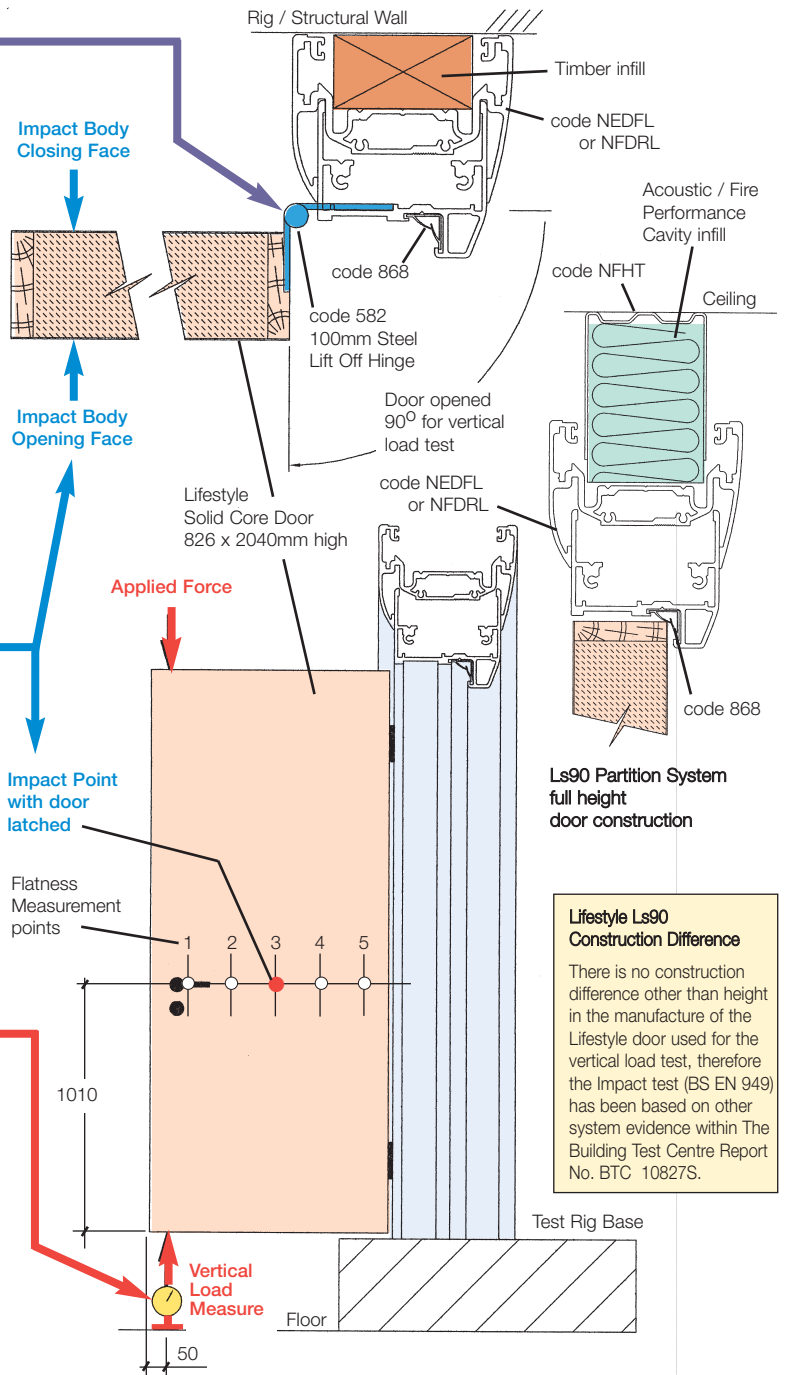
Test No. T891		Test Date: 26th August 1996		
Hinge Endurance Test to BS 7352: 1990, item 5.3				
Test element mass kg	No. of cycles	Vertical deformation mm	Lateral deformation mm	Category of duty
120	206,000	0.23	0.18	-
120	604,000	0.40	0.20	Grade 9
Remarks: tests stopped at 604.000 cycles				

Hinge Load Deformation Test to BS 7352: 1990, item 5.2.2.1					
Test element mass kg	Vertical deformation mm	Without load mm	Lateral deformation mm	Without load mm	Category of duty
240	0.60	0.45	0.48	0.20	Grade 9

Overload Test to BS 7352: 1990, item 5.2.2.2					
Test element mass kg	Vertical deformation mm	Without load mm	Lateral deformation mm	Without load mm	Category of duty
360	0.92	0.70	1.03	0.60	Grade 9
Remarks: no visible cracks, deformation or breakage					

Test Report: BTC 10827S		Test Date: 28th October 1999			
Soft Heavy Body Impact Test to BS EN 949: 1999					
Face tested	Test element mass kg	Measure position	Deviation from flatness mm		Category of duty
			Before Impacts	After Impacts	
Opening	3 @ 50	1	0.0	0.0	Severe
		2	0.0	0.0	
		3	0.0	0.0	
		4	0.0	0.0	
		5	0.0	0.0	
Closing	3 @ 50	1	0.35	0.35	Severe
		2	0.20	0.20	
		3	0.25	0.20	
		4	0.50	0.60	
		5	0.60	0.60	

Test Report: BTC 12722S		Test Date: 14th April 2003		
Doorset Vertical Load Test to BS EN 947: 1999				
Description	Vertical load N	Maximum deformation mm	Residual deformation mm	Category of duty
Doorframe fixed directly to rig / structural wall	1000	1.11	0.49	Severe
Doorframe fixed directly to 2.7m high partition	1000	0.90	0.13	partition not classified in standard



Lifestyle Ls90 Construction Difference

There is no construction difference other than height in the manufacture of the Lifestyle door used for the vertical load test, therefore the Impact test (BS EN 949) has been based on other system evidence within The Building Test Centre Report No. BTC 10827S.

See Komfort data sheets for full assembly details.

The above data must be read in conjunction with test summary description given overleaf.

The information given is an extract of the test reports supplied by The Building Test Centre, East Leake, Loughborough and ASSA Testing Laboratory PC-Teknik.

BTC is a UKAS approved test laboratory.

