



**REPORT REGARDING TESTS ON WALL-MOUNTED METAL FRAMES FOR POCKET DOORS.  
CUSTOMER: SCRIGNO S.p.A.**

At the specific request of the manufacturer, certain tests have been carried out in order to characterise the performance and application limits of the "SCRIGNO" frame. This work relates partly to current legislation and partly to technical specifications formulated by the manufacturer in order to specify the product's performance limits more clearly. In particular, the following tests were performed:

**Soft body impact test on the interior wall in accordance with standard UNI 8201:1981, clause 2.**

The full results are set out in *Test Report No. 204991 dated 28/11/2005* and summarised in the following table.

Drop height [mm]	Maximum set [mm]	Permanent set [mm]	Outcome
50	8,32±0,01	0	No damage or cracking in the area where frame is secured to masonry

**Hard body impact test on the interior wall in accordance with standard UNI 8201:1981, clause 2.**

The full results are set out in *Test Report No. 204990 dated 28/11/2005* and summarised in the following table.

Drop height [mm]	Immediate set [mm]	Indentation diameter [mm]	Indentation depth [mm]	Outcome
200	0	9,5±0,7	0,17±0,02	No damage

Both tests were used to determine the strength of the frame/masonry assembly under close-to-real conditions and assess resistance to the slight knocks that can occur inside a home or office during normal daily activities.

**Determination of the resistance under concentrated load of the frame in accordance with Customer specifications.**

The full results are set out in *Test Report No. 210387 dated 27/04/2006*.

**Determination of the resistance under distributed load of the frame in accordance with Customer specifications.**

The full results are set out in *Test Report No. 210388 dated 27/04/2006*.

Both tests were used to determine the maximum permissible load on the frame when fitting and the load that will keep deformation of the metal frame/side-wall assembly within the minimum value. The permissible loads appear to exceed the requirements likely to apply during installation.

**Determination of the static load capacity of hangers in accordance with Customer specifications.**

The full results are set out in *Test Report No. 204988 dated 28/11/2005*.

This test is complementary to the subsequent one and enabled determination of the maximum permissible load of the guide/hanger assembly that represents the sole support for the vast majority of door panels. The test shows that the average maximum load is 6222 ± 417 N, about 10 times greater than the product's standard working load.

Bellaria, 08/09/2006

Istituto Giordano S.p.A.

**Determination of the operating force of hangers whilst loaded and during opening/closing cycles in accordance with Customer specifications.**

This test has simulated the daily use of a guide/hanger/door assembly for 100000 cycles, verifying the operating force every 10000 cycles (assuming it is opened 14 times a day, this represents a product life of 20 years). The test was carried out with the two hangers loaded with a mass representing the maximum recommended by the manufacturer and travel equal to the average opening of a standard door.

The full results are set out in *Test Report No. 204989 dated 28/11/2005* and summarised in the following table.

Cycles	Operating force (N)
0	12,0
100000	15,6

Upon completion of the cycles, no traces of wear or functional damage of the guide/hanger assembly were noted.

**Mechanical testing of sliding door fittings in accordance with standard UNI EN 1527:2000.**

This test simulates the daily use of a guide/hanger/door assembly for 100000 cycles, verifying overload resistance, operating force and wear resistance during the cycles.

The full results are set out in *Test Report No. 206387 dated 05/01/2006* with particular reference to:

- subclause 6.3.1.1.1 "Performance tests - Heavy sliding doors, top hanging - Static load test."

No permanent deformation of the hanger/guide assembly following application of a load of 240 kg for a period of not less than 10 minutes.

- subclause 6.3.1.1.2 "Performance tests - Heavy sliding doors, top hanging - Initial friction test."

Force required to overcome the initial friction of the hangers (N)	Grade (digit 9)
15,6	3

- subclause 6.3.1.1.3 "Performance tests - Heavy sliding doors, top hanging - Durability test."

Cycles	Total weight of test panel	Outcome	Grade (digit 2)
100000	120	Slight signs of wear on the hanger bearings and rubber	6

In accordance with the tests carried out, the results obtained and the provisions of clause 4 of standard UNI EN 1527:2000, the sample called "SCRIGNO track/hanger assembly" submitted by the company Scrigno S.p.A. - Via Casale, 975 - 47822 Sant'Ermete (RN), can be classified as follows:

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