

REPORT

2008-09-29

Reference P803159A Page 1 (2)

Handled by, department
Bengt-Åke Andersson
Wood Technology
+46 10 516 54 34, bengt-ake.andersson@sp.se

Lammhults Möbel AB Box 26 360 30 LAMMHULT Sweden

Testing of Campus Air (BIFMA X5.1-2002)

1 Introduction

On behalf of Lammhults Möbel AB, a Campus Air chair has been tested by SP in accordance with ANSI/BIFMA X5.1-2002.

2 Test specimen

Figure 1 Campus Air



Frame:

Steel tube Ø16 mm

Seat / backrest:

Moulded polyamide (PA6) reinforced with glass fibre

The test specimen was selected by the customer and arrived at SP on July 2, 2008.

3 Test methods and test procedure

Before testing the test specimen was conditioned for one week in a climate of 23°C \pm 2°C and 50 \pm 5% relative humidity. Testing was also carried out in this climate.

The test methods are explained in table 1 in accordance with ANSI/BIFMA X5.1-2002

The tests were carried out over the period July 9 – September 19, 2008.

SP Technical Research Institute of Sweden



REPORT

4 Results

Table 1

BIFMA X5.1-2002	Tests	Forces	Cycles / time / Drop height	Results
6	Backrest Strength Test - Static			
6.4.1	Functional Load	667 N	1 cycles, 1 minute	√
6.4.2	Proof Load	1112 N	1 cycles, 1 minute	√
8	Drop test			
8.4.1	Functional Load Test	102 kg	1 cycles, 152 mm	1
8.4.2	Proof Load Test	136 kg	1 cycles, 152 mm	√
11	Seating Durability Tests - Cyclic			
11.3.1	Impact	57 kg	100 000 cycles, 25 mm	√
11.4	Front Corner Load-Ease Test	734 N	20 000 cycles	√
12	Stability Tests			
12.3	Rear Stability			√
12.4	Front Stability			1
16	Backrest Durability Test - Cyclic	Seat 102 kg Back 334 N	120 000 cycles	1
18	Leg Strength Test			
18.3	Front load test			
18.3.2.1	Functional Load	334 N	1 minute	√
18.3.2.2	Proof Load	512 N	1 minute	√
18.4	Side load test			
18.4.2.1	Functional Load	334 N	1 minute	√
18.4.2.2	Proof Load	512 N	1 minute	√

 $\sqrt{}$ The test has been completed without any remarks

The tested chair fulfils the requirements according to ANSI/BIFMA X5.1-2002.

The test results apply solely to the tested specimen.

SP Technical Research Institute of Sweden Wood Technology

Bertil Johansson Technical Manager Bengt-Åke Andersson

Technical Officer