



## TEST REPORT No. 343591

**Place and date of issue:** Bellaria-Igea Marina - Italy, 30/06/2017

**Customer:** LOGLI MASSIMO S.p.A. unipersonale - Via Chemnitz, 49/51 - Zona Industriale Macrolotto 2 - 59100 PRATO (PO) - Italy

**Date test requested:** 12/06/2017

**Order number and date:** 73507, 12/06/2017

**Date specimen received:** 21/06/2017

**Test date:** 21/06/2017

**Purpose of test:** uniform snow load on a shelter

**Test site:** Istituto Giordano S.p.A. - Via Erbosa, 72 - 47043 Gatteo (FC) - Italy

**Specimen origin:** sampled and supplied by the Customer

**Identification of specimen received:** No. 2017/1474/B

### Specimen name\*

The test specimen is called "LA PENSILINA-DG41".

(\*) according to that stated by the Customer.

Comp. AV  
Revis. MN

This test report consists of 8 sheets.

This document is the English translation of the test report No. 343591 dated 30/06/2017 issued in Italian;  
in case of dispute the only valid version is the Italian one. Date of translation: 16/02/2018.

Sheet  
1 of 8

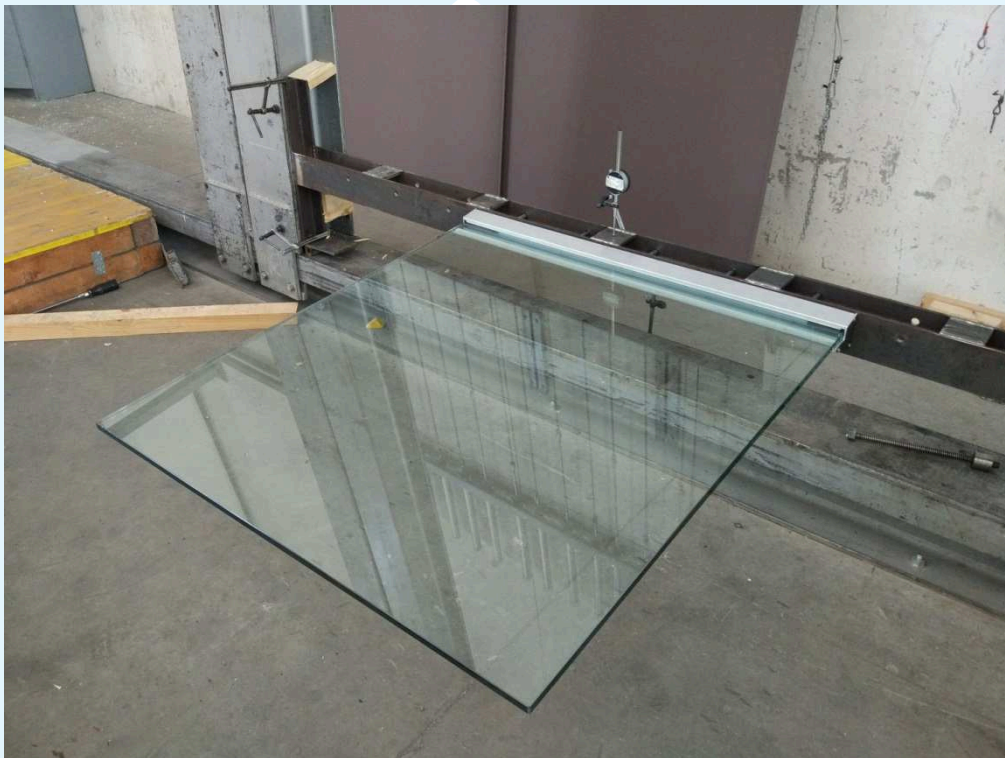
### **Description of specimen\***

The test specimen is a shelter consisting of:

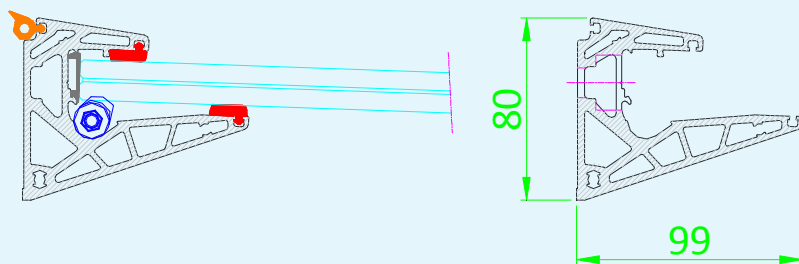
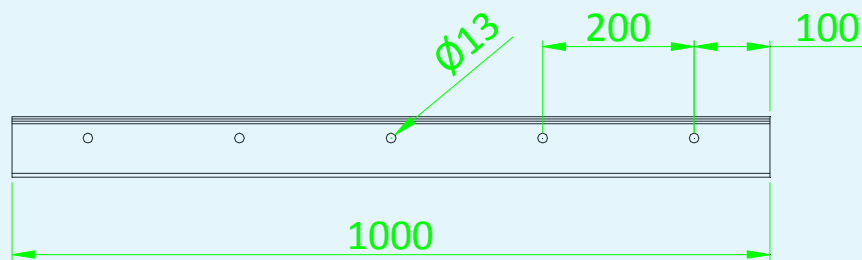
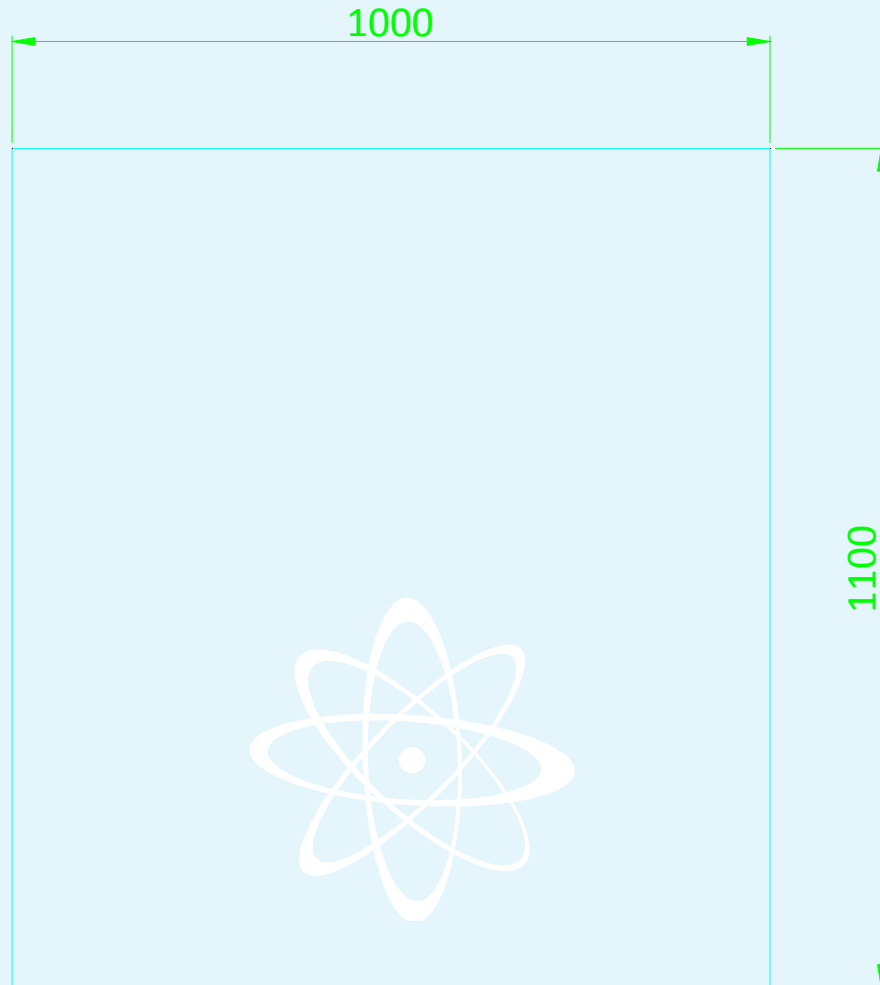
- glazing panel comprising 8.8.2 Float + DG 41 laminated glass, nominal length 1000 mm and nominal projection 1100 mm;
- aluminium fixing system.

The specimen also has a test frame in which it was installed by the Customer at 5 fixing points using steel nuts and bolts.

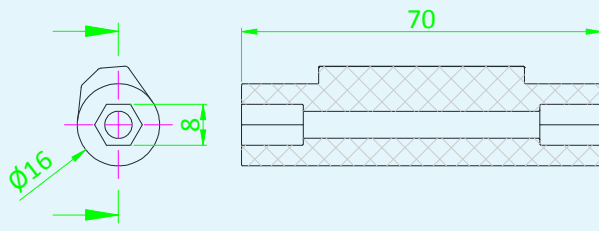
Further details of specimen specifications can be seen in the Customer-supplied schematic drawings on the next page.



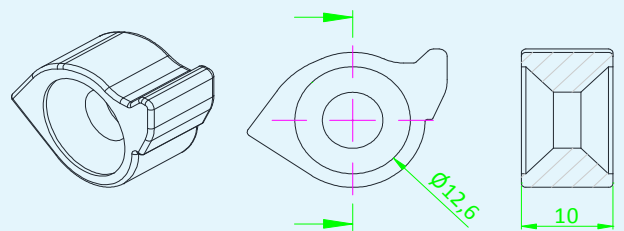
**Specimen photo**



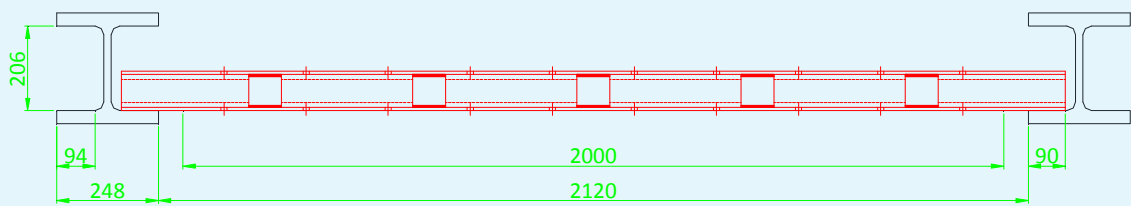
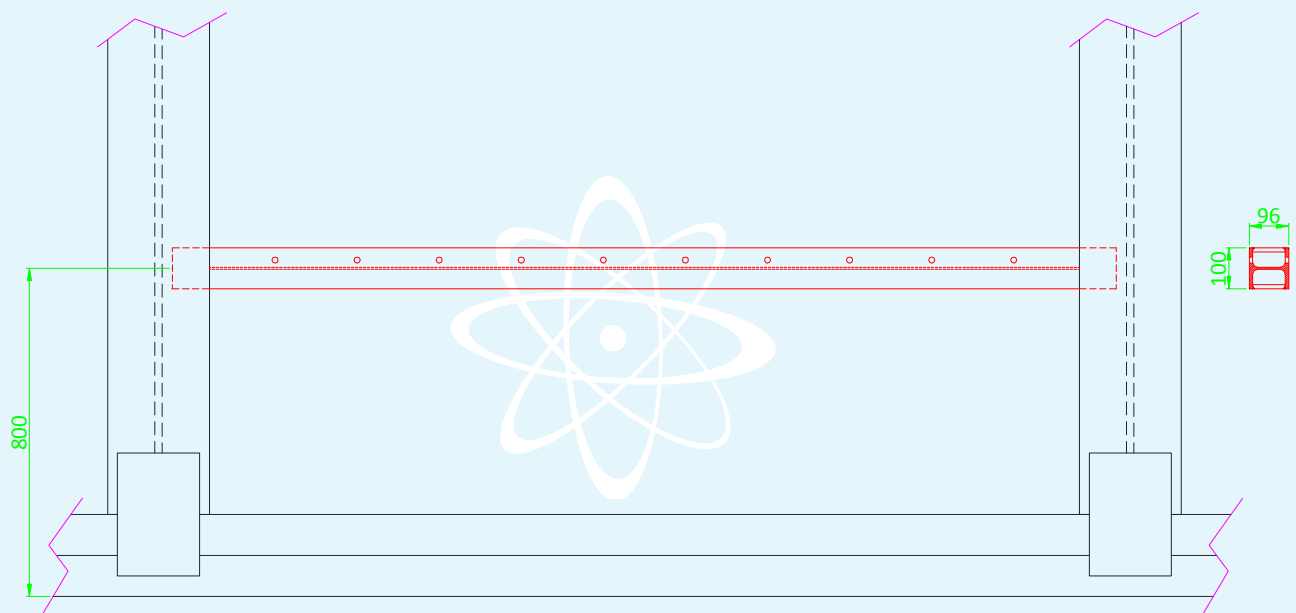
Specimen



**Cam**



**Safety catch**



**Test frame**

### **Test apparatus**

The following equipment was used to carry out the test:

- steel test rig;
- loading mass comprising:
  - bags of lead, weight 5 kg each;
  - steel discs, weight 10 kg each;
- 2 displacement gauges with 0,01 mm resolution, one analogue type and one potentiometer.

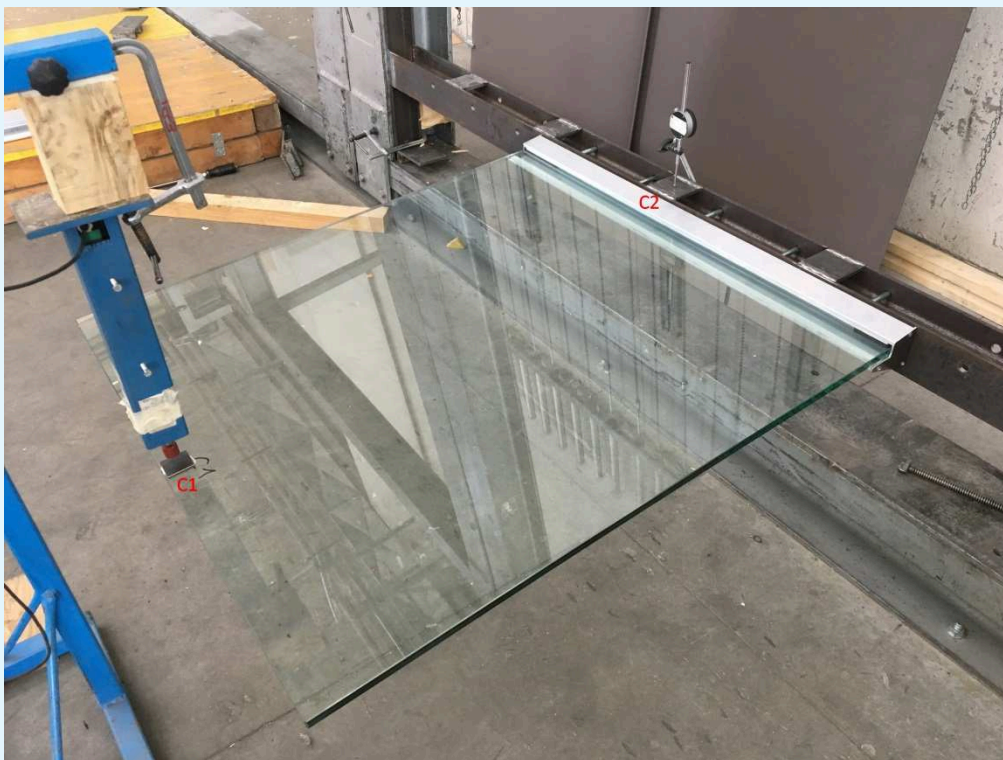
### **Test method**

The test was carried out in accordance with Customer instructions, securing the specimen to the test rig using its test frame and applying a uniform load to the glazing panel using the loading mass.

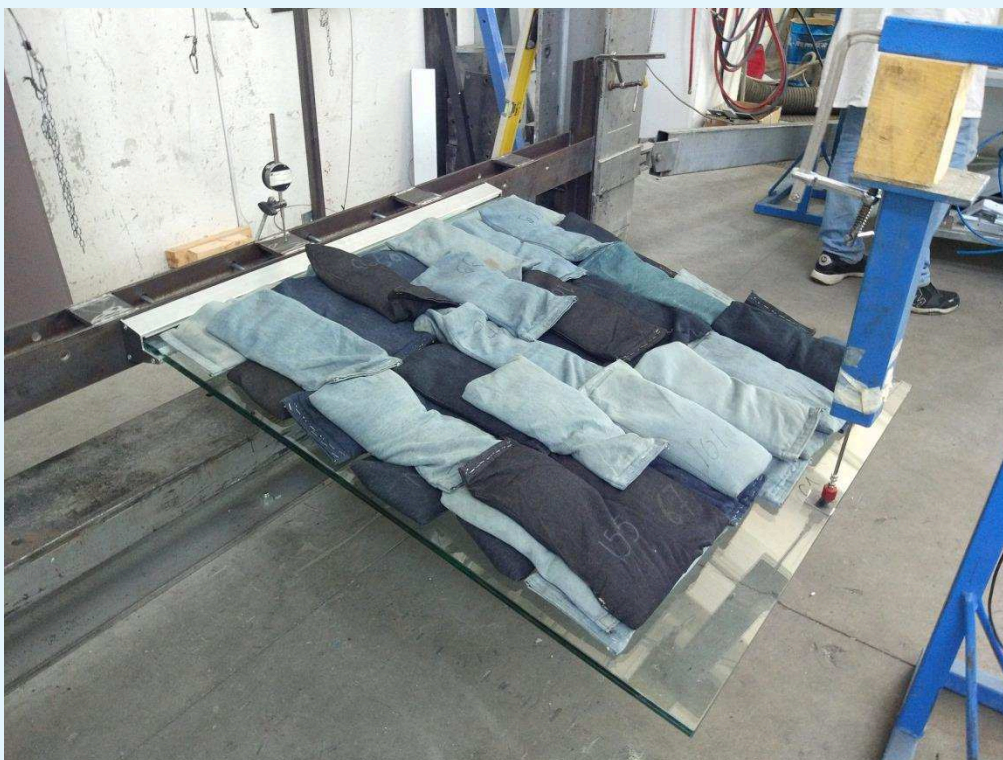
After positioning the loading mass, deflection was measured at each load step using the two displacement gauges with 0,01 mm resolution arranged as shown in the photo on the next page.

### **Environmental conditions during test**

<b>Average ambient temperature</b>	30 °C
<b>Average relative humidity</b>	48 %



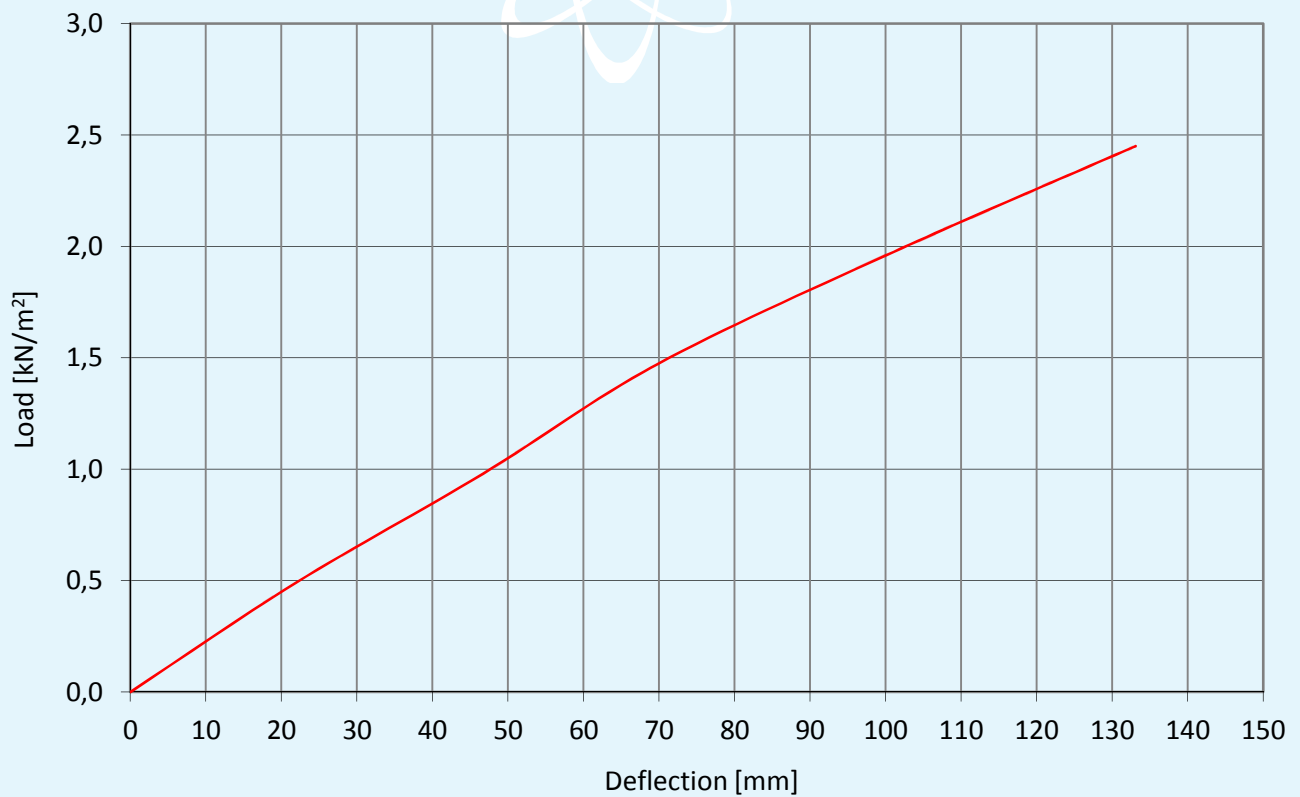
**Specimen photo showing measuring points**



**Photo of specimen during test**

**Test results**

Load applied				Deflection under uniform load		Notes
				at point "C1"	at point "C2"	
[kg]	[kN]	[kg/m <sup>2</sup> ]	[kN/m <sup>2</sup> ]	[mm]	[mm]	
0	0,00	0	0,00	0,00	0,00	//
55	0,54	50	0,49	21,90	-0,06	//
110	1,08	100	0,98	46,70	-0,69	//
165	1,62	150	1,47	69,70	-1,13	//
220	2,16	200	1,96	100,05	-1,30	//
275	2,70	250	2,45	133,10	-1,40	//
<b>275</b>	<b>2,70</b>	<b>250</b>	<b>2,45</b>	//	//	<b>specimen failure</b>

**Load/deflection curve for point "C1"**



Specimen after-test photo

### Findings

On the basis of the test performed, the test specimen, comprising a shelter called “LA PENSILINA-DG41” submitted by the company LOGLI MASSIMO S.p.A. unipersonale - Via Chemnitz, 49/51 - Zona Industriale Macrolotto 2 - 59100 PRATO (PO) - Italy, obtains the results given in the following table.

Length “Z” [mm]	Projection “L” [mm]	Ultimate load	
		[kg/m <sup>2</sup> ]	[kN/m <sup>2</sup> ]
1000	1100	275	2,45

Test Technician:  
Ing. Matteo Naviglio

Head of Security and Safety Laboratory:  
Dott. Andrea Bruschi

Chief Executive Officer

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