



POLITECNICO
MILANO 1863

Laboratorio Prove Materiali - NB 1777 CPR

Notified Body 1777 - CPR

CERTIFICATE OF CONSTANCY OF PERFORMANCE
1777 - CPR - 19.03

In compliance with Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Displacement Dependent Device with Non Linear Response

with trade name

DISPOSITIVO STABILFLEX – DISSIPATORE 720

Hysteretic energy dissipating device to use in buildings and civil engineering works where requirements on individual devices are critical,

placed on the market under the name or trade mark of

BIEMME SRL

Via Tevere, 26 – 61030 Lucrezia di Cartoceto (PU) - Italy

and produced in the manufacturing plant

BIEMME SRL – Via Tevere, 26 – 61030 Lucrezia di Cartoceto (PU) - Italy

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 15129:2009

under System 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on 17 December 2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The main characteristics of the product are reported in the Annex to this certificate.

Milan, 17 December 2019

Revision n. 0

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**Annex to Certificate of Constancy of Performance
no. 1777 – CPR – 19.03**

Displacement Dependent Device with Non Linear Response

with trade name

DISPOSITIVO STABILFLEX – DISSIPATORE 720

Description of the product

DISPOSITIVO STABILFLEX – DISSIPATORE 720 is an energy dissipating device relying on the hysteretic behavior of a steel element deformed in tension and compression beyond its elastic limit. The device is not designed to carry vertical loads and is classified as a Displacement Dependent Device with Non Linear Response in accordance with Table 1 of hEN 15129:2009.

The material of the deforming elements is Alloy A¹.

The temperature range is from +5° C to +40° C.

The intended use is in buildings and civil engineering works.

¹ appropriate certificates reporting the identification characteristics of the alloy are deposited at the Notified Body.

The devices are manufactured in the factories of:

FACTORY A 696 – Italy²

FACTORY B 232 – Italy²

FACTORY C 692 – Italy²

FACTORY D 204 – Italy²

² appropriate document reporting the identification of the factories and outsourcers involved in the manufacturing process are deposited at the Notified Body.

Performance characteristics

DISPOSITIVO STABILFLEX – DISSIPATORE 720 meets the following requirements in accordance with hEN 15129:2009:

- evaluation of the force-displacement cycle, clause 6.4.4 a
- ramp test for the static evaluation of the failure displacement, clause 6.4.4 b



Type, identification and use

DISPOSITIVO STABILFLEX – DISSIPATORE 720 product type is evaluated on the basis of the results reported below

<i>Deforming element dimension</i>	<i>Design value</i>	<i>Unit</i>
Length	720.00	mm
Thickness	20.00	mm
Internal radius	310.85	mm
Edge width	40.08	mm
Intermediate width	60.34	mm
Central width	78.52	mm
<i>Essential characteristics</i>	<i>Design value</i>	<i>Unit</i>
Load bearing capacity	Not applicable	==
Survivability against repeated load cycling	Conforming	==
Stiffness		
K ₁	1.003	kN/mm
K ₂	0.268	kN/mm
K _{eff}	0.595	kN/mm
Energy dissipation capability	18.91	%
Horizontal distortion capability	±40	mm
Durability aspects	Conforming	==

According to Test Report no. 2019/2044

DISPOSITIVO STABILFLEX – DISSIPATORE 720 products covered by the present Certificate of Constancy of Performance are manufactured in accordance with the same design, parametric technical solutions and materials.

The dimensions of the products covered by the present Certificate of Constancy of Performance can vary in the dimensional range defined below in accordance with clause 6.4.4 of hEN 15129:2009

<i>Deforming element dimension</i>	<i>Linear range</i>	<i>Unit</i>
Length	576.00 to 864.00	mm
Thickness	16.00 to 24.00	mm
Internal radius	248.68 to 373.02	mm
Edge width	32.06 to 48.10	mm
Intermediate width	48.27 to 72.41	mm
Central width	62.82 to 94.22	mm

Milan, 25 January 2021

Prof. Ing. Carlo Poggi
Head of Certification Body