SEISMIC
Qualification Certificate

***Delivered on**:* **Wednesday, 14 March 2018**

***References**:*

- **VIRLAB** test procedure number **160808E1**, issue 2, dated 20/02/2018: "*STANDARD TEST PROCEDURE FOR THE SEISMIC QUALIFICATION OF ELECTRICAL CABINETS ACCORDING TO GR-63-CORE (ZONE 4), ISSUE 4*".
- **Point 5.4.1**, *Earthquake Test Methods*, of TELCORDIA TECHNOLOGIES GENERIC REQUIREMENTS, "**GR-63-CORE**", Issue 4, April 2012:
- INTERNATIONAL STANDARD **IEC 60068-2-6:2007***: Environmental testing – Part 2: Tests – Fc: Vibration (sinusoidal).*
- INTERNATIONAL STANDARD **IEC60068-2-47: 2005**: "*Environmental testing - Part 2-47: Tests. Mounting of specimens for vibration, impact and similar dynamic tests*".

***Laboratory Name**:* **VIRLAB, S.A.** (accredited by ENAC, Spanish National Accreditation Entity).
ENAC certificate number 54/LE131.

***Laboratory Address**:* Polígono Industrial de Asteasu, Zona B - 44
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20159 ASTEAU (SPAIN)

***Client**:* **SILENTFLEX**

Equipment tested**:* Two (2) ***Non Raised Floor Plinth, manufactured by **SILENTFLEX,** assembled together with two (2) *Racks*, as described here below:

- Drawing: A152270 - BANCADA SUELO CON TOPES VERTICALES – BANCADA COMPLETA - R0, dated 22/01/2018
- Each Rack Dimensions: 800 (width) x 1200 (depth) x 2150 (height) mm
- Assembly Dimensions: 1600 (width) x 1200 (depth) x 2150 (height) mm
- Weight: ~750 Kg *(Rack)* + 100 Kg *(Bench)*, for a total of 1700Kg

Pictures included here below show the ***Assembly*** on the test platform, in *front-to-back*, "X", and *side-to-side*, "Y", directions. Vertical tests have been performed with the ***Assembly*** on the test platform mounted on the same way as in the *side-to-side*, "Y", direction.

NOTE: *According to Section 5.10.2 of Standard ISO-IEC 17025:2005, it is stated that the results of the present certificate apply only and exclusively to the samples subjected to test.*

"X & Z" Direction

"Y" Direction

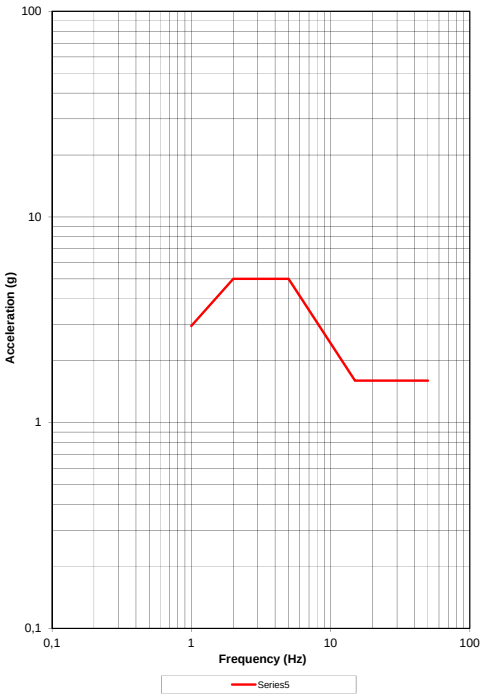
VIRLAB, S.A., certifies that the ***Non Raised Floor Plinths*** with the *Racks* described here above has been tested in its laboratory of ASTEASU (Spain) the 13nd March 2018, as describe in test procedure number **160808E1,** Issue 2, of VIRLAB, elaborated according to **Point 5.4.1**, *Earthquake Test Methods*, of TELCORDIA TECHNOLOGIES GENERIC REQUIREMENTS, "**GR-63-CORE**", Issue 4.

The ***Assembly*** has been submitted to the tests described here below:

- Resonance search tests, between 1-50-1 Hz, with an acceleration level of 0.2 g, independently performed in each one of the three main directions of the ***Assembly***, *vertical (Z). front-to-back (X)*, and *side-to-side* (Y).
- Seismic tests, consisting of one (1) test, 30 seconds duration, independently applied in vertical "Z", and in horizontal, "X" (*front-to-back*) and "Y" (*side-to-side*) directions. The applicable Required Response Spectra, **RRS (***2% damping*), considers a Zero Period Acceleration of 1,6 g, as included here below:

NOTE: *According to Section 5.10.2 of Standard ISO-IEC 17025:2005, it is stated that the results of the present certificate apply only and exclusively to the samples subjected to test.*

REQUIRED RESPONSE SPECTRA, RRS (2%)
ZONE 4 - HORIZONTAL & VERTICAL



This ***Assembly*** has successfully passed the Seismic Tests, to which it has been subjected, maintaining their structural integrity, without any anomaly or structural deterioration having been detected.

Test report number **182728 of VIRLAB, S.A.**, will include all the information obtained, with tables, photographs, used measuring devices calibration certificates, and other relevant information.

VIRLAB representative

Laboratory Engineer

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