


The seismic design study starts from the vulnerability evaluation of the structure located in different geographical scales. Thanks to the activity developed together with the Foundation Eucentre Pavia, TREES Lab (Laboratory for Training and Research in Earthquake Engineering and Seismology), we have set the following research activities:

- 1 Modelling and numerical simulation of the seismic response of two cabinets, in order to study, during the design phase, the behaviour that the systems considered (E NUX with anti-vibration plinth and E NUX with anti-seismic kit) would have manifested towards seismic actions in various geographical areas and on different soils.
- 2 Seismic simulation of the two cabinets dynamic behaviour on a vibrating table, with experimental tests on structures in order to realize experimental research on prototypes, also in large-scale (both static and dynamic tests).

 For more information, see the Technical section on page 349.

SEISMIC DESIGN

EUKA CODE	VERSION	CABINET DIM.		
		L	A	P
EUKA-080060B	BASIC	800	ALL	600
EUKA-080080B	BASIC	800	ALL	800
EUKA-100060B	BASIC	1000	ALL	600
EUKA-080060M	MEDIUM	800	ALL	600
EUKA-080080M	MEDIUM	800	ALL	800
EUKA-082006S	STRONG	800	2000	600
EUKA-082008S	STRONG	800	2000	800



1 BASIC VERSION

TECHNICAL DATA

Peak acceleration $\leq 1G$.
Mounting plate loaded up to 130 Kgs.

CHARACTERISTICS

- Plinth manufactured from press bent sheet steel, H=100, with anti-vibration elements and the possibility of floor fixing. Painting colour: RAL 5020 textured finish.
- Rails WTPR (2 pieces) mounted in depth for the central fixing of the mounting plate + WTSF-001.

2 MEDIUM VERSION

TECHNICAL DATA

Peak acceleration $\leq 1G$.
Loaded mounting plate $> 130 \leq 450$ Kgs.

CHARACTERISTICS

- Plinth manufactured from press bent sheet steel, H=100, with anti-vibration elements and the possibility of floor fixing. Painting colour: RAL 5020 textured finish.
- Rails WTPR (2 pieces) mounted in depth for the central fixing of the mounting plate + WTSF-001.
- 2 top and bottom fixing brackets for mounting plate, manufactured of galvanized steel.

3 STRONG VERSION

TECHNICAL DATA

Peak acceleration $> 1G$.
Loaded mounting plate ≤ 450 Kgs.

CHARACTERISTICS

- Plinth manufactured from press bent sheet steel, H=100, with anti-vibration elements and the possibility of floor fixing. Painting colour: RAL 5020 textured finish.
- Rails WTPR (2 pieces) mounted in depth for the central fixing of the mounting plate + WTSF-001.
- 2 top and bottom fixing brackets for mounting plate, manufactured of galvanized steel.
- 4 stiffening frames manufactured from galvanized steel.
- 8 stiffening structure brackets manufactured from galvanized steel.

COMPLIANT WITH THE TELCORDIA GR63 CORE SEISMIC REGULATION

In order to evaluate the performance of enclosures installed in zones with high seismic risk, the UBC (Uniform Building Code) is used as a reference. This establishes how the various areas of the building must be divided into zones with increasing level of severity (zone 4 = high risk).

In order to carry out the conformity tests, the study takes over in compliance with the American Bellcore regulation, which is used as a reference in the sector. Thanks to the collaboration with Fondazione Eucentre (Laboratory for Training and Research in Earthquake Engineering and Seismology - University of Pavia) and CESI, a pseudo-static study dedicated to modelling with elastic response spectra has been prepared to increase the ETA enclosures offer with seismic design, proposing specific solutions in compliance with the Bellcore (TELCORDIA-GR-63-CORE-Issue3, March 2006) seismic regulation.

4 SOLUTION E NUX SINGLE DOOR WITH ROTARY PLATE AND RACK

Bellcore Standard (TELCORDIA-GR-63-CORE-Issue3, March 2006) zone 1, 2 and 3

LOAD ON PLATE

Up to 1600 N
with plate mounted in recessed version.

LOAD ON RACK FRAME

Up to 1000 N
with decentralised rotary rack frame.

5 SOLUTION E NUX DOUBLE DOOR WITH MOUNTING PLATE AND SINGLE DOOR WITH RACK UPRIGHTS, JOINED IN SERIES

Bellcore Standard (TELCORDIA-GR-63-CORE-Issue3, March 2006) zone 1 and 2

LOAD ON PLATE

Up to 1600 N
with plate mounted in recessed version.

LOAD ON RACK UPRIGHTS

Up to 2000 N.

6 SOLUTION E NUX DOUBLE DOOR WITH MOUNTING PLATE AND SINGLE DOOR WITH RACK UPRIGHTS, JOINED IN SERIES

Bellcore Standard (TELCORDIA-GR-63-CORE-Issue3, March 2006) zone 3

LOAD ON PLATE

Fino a 1600 N
with plate mounted in recessed version.

LOAD ON RACK UPRIGHTS

Up to 2000 N.

ETA proposes 6 seismic design solutions.

The ETA NEXT team will be able to suggest the best solution for your application:

THE CUSTOMER INDICATES:

- Place of installation
- Elastic response spectrum
- Peak acceleration and seismic zone according to Telcordia



THE ETA NEXT TEAM:

- Compares the report data available with the customer's data
- Assesses the various models and proposes the most suitable one
- Provides evidence of the choices proposed
- Suggests the best solution for the specific case

Technical support and skill make a difference when choosing a supplier.