# Seismic S-Series Enclosures

## Features

- Tested to NEBS Zone 4 via Telecordia GR-63-CORE
- Weight loads up to 1300 lbs. (590 kg)
- Welded 12 gauge steel enclosures
- Fully configured 42U enclosures
- 24" and 30" enclosure widths
- Overall height: 84”

## Primary Markets/Applications:

- Enterprise data centers
- Colocation or web hosting data centers
- Networking room

Seismic enclosures are the solution of choice for installations where shock and vibration are factors. This includes earthquake zones, transportation (railway and shipboard) and high vibration environments such as power plants and airports. Seismic enclosures protect your electronics by providing enhanced frame strength and rigidity.

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# What is Seismic?

Seismic products are performance tested according to Telcordia (formerly Bellcore) GR-63-CORE Network Equipment Building System (NEBS™) requirements for physical protection. A Telcordia GR-63-CORE compliant test must be conducted by a Nationally Recognized Testing Laboratory (NRTL) or other recognized independent laboratory before certification will be issued. This test is conducted on an installation-specific basis with customer-installed equipment and cabling mounted inside.

## Testing

Eaton has tested specific seismic configurations under weight loading and equipment loading conditions. The testing verified the enclosure performance up to NEBS Zone 4 for weight load up to 1300 lbs. (590 kg). During testing, the enclosures showed no deformations to the frame or any load bearing elements. A detailed test report is available on our web site.

Different enclosure applications will likely require additional seismic testing to ensure performance based on the specific equipment loading and weights.

There are many factors which impact the ability of an enclosure and equipment mounted internally to withstand the shock and vibration conditions typical of seismic applications. These include:

- Weight of the equipment loaded into the enclosure
- Center of gravity of the enclosure with the equipment loaded
- Attachment/anchoring
- Height and width of the enclosure
- Level of seismic activity

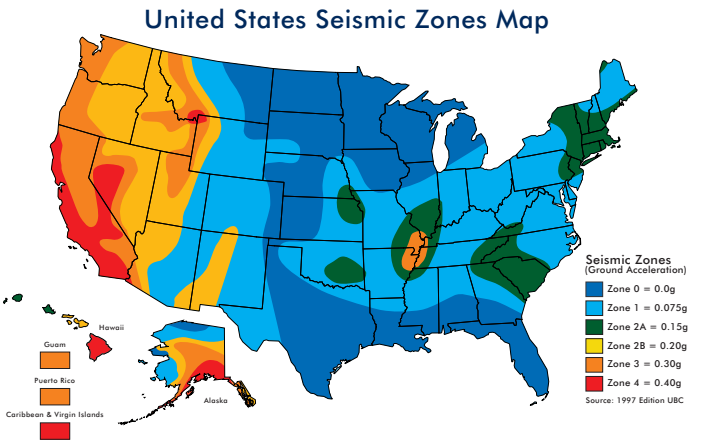
## Design

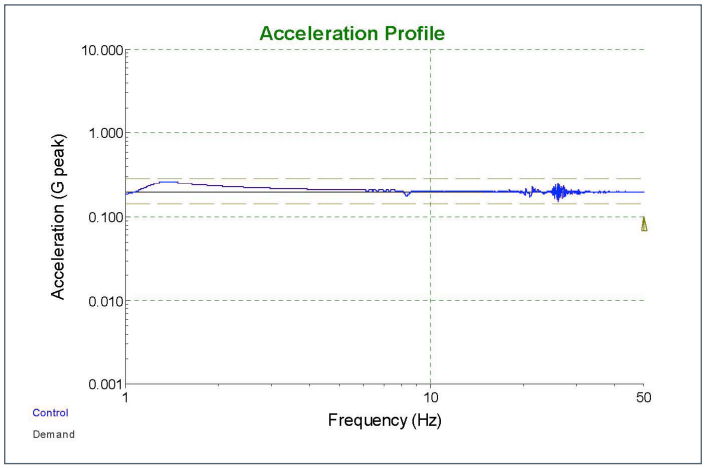
The enclosure performance may change once equipment is installed - depending on the weight, positioning and attachment features. These changes may or may not affect the seismic stability of the enclosure.

Eaton's application engineering specialists will work with you to configure a solution which best meets your application requirements. From FEA (Finite Element Analysis) through testing – we will partner with you to create a solution which meets your seismic requirements.

## Seismic Zones

Seismic enclosure standards are often specified in terms of the earthquake risk zones. As shown in the seismic map, zones vary from 0 to 4 – with the zone 0 designating no substantial risk. Zones 3 and 4 are generally viewed as regions where Seismic enclosures are needed.




Enclosure Acceleration Profile

Enclosure seismic testing

# Key Design Elements

## Product Details

- Fully configured Seismic Enclosures
- Tested to Telecordia GR-63-Core seismic requirements up to 1,300 lbs. (590 kg)
- 12 gauge steel construction
- Size:  84"H (42U usable vertical space), 24"W or 30"W and 40"D
- NEBS rated doors with Dirak swing handle three-point latching system (Black)
- Dirak swing handle is the NEBS approved lock for this enclosure
- Doors have full perforation pattern
- Standard Titanium insert panels are used with the NEBS door frames
- Mechanically fastened NEBS rated side panels or divider panels (Black)
- Frame is configured with networking top panel
- Seismic mounting washers included with the frame
- Lacing bar provided for ePDU mounting in rear
- Grounding kit included
- Rails (4) with .375" square holes provided for 19" mounting

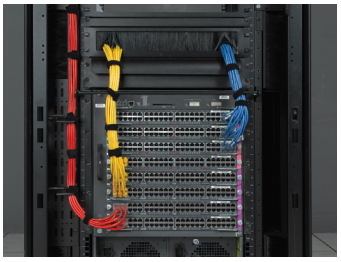
**Flexible front-to-back mounting for vertical rails**

**Seismic bracing ensures stability.**

**Reinforced corners**

## Features

Lacing bars are included for power (ePDU) mounting.



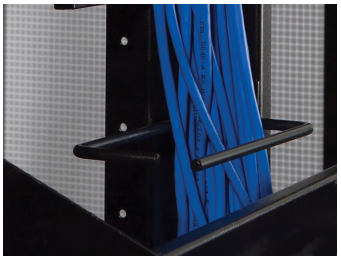
The frame design efficiently accommodates large quantities of cables.

Vertical 19" EIA Rails are included with each configuration.

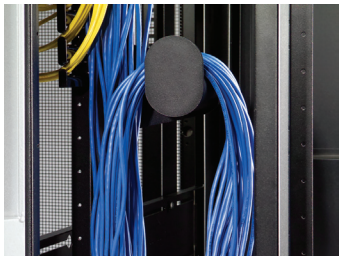
Fully perforated door with latching handle.

## Accessories

Blanking panels provide a quick, easy and cost effective solution to optimize air circulation within an enclosure.



Cable rings allow for vertical cable management and can accommodate up to 129 CAT 5 cables.



Take-up spools help manage excess network or power cables with integrated bend radius support.

Full range of Eaton ePDUs

*Visit www.eaton.com/S-Series to view a full range of accessories.*

# S-Series Seismic Enclosure Configurations

**ETN-ENZ422440S**

| Description | Quantity |
|---|---|
| Color: Black | |
| Seismic frame: 42U x 24"W x 40"D | 1 |
| Seismic divider panel | 1 |
| Rails - square holes (4) | 1 |
| Seismic trim kit | 1 |
| Seismic door frame | 2 |
| Perf insert for seismic door | 2 |
| Key lock | 2 |
| Lacing bar for ePDU mounting | 1 |
| Grounding kit | 1 |
| Networking top | 1 |

**ETN-ENZ422440SB**

| Description | Quantity |
|---|---|
| Color: Black | |
| Seismic frame: 42U x 24"W x 40"D | 1 |
| Seismic side panels | 2 |
| Rails - square holes (4) | 1 |
| Seismic trim kit | 1 |
| Seismic door frame | 2 |
| Perf insert for seismic door | 2 |
| Key lock | 2 |
| Lacing bar for ePDU mounting | 1 |
| Grounding kit | 1 |
| Networking top | 1 |

**ETN-ENZ423040S**

| Description | Quantity |
|---|---|
| Color: Black | |
| Seismic frame: 42U x 30"W x 40"D | 1 |
| Seismic divider panel | 1 |
| Rails - square holes (4) | 1 |
| Seismic trim kit | 2 |
| Seismic door frame | 2 |
| Perf insert for seismic door | 2 |
| Key lock | 1 |
| Lacing bar for ePDU mounting | 1 |
| Grounding kit | 1 |
| Networking top | 1 |

**ETN-ENZ423040SB**

| Description | Quantity |
|---|---|
| Color: Black | |
| Seismic frame: 42U x 30"W x 40"D | 1 |
| Seismic side panels | 2 |
| Rails - square holes (4) | 1 |
| Seismic trim kit | 2 |
| Seismic door frame | 2 |
| Perf insert for seismic door | 2 |
| Key lock | 1 |
| Lacing bar for ePDU mounting | 1 |
| Grounding kit | 1 |
| Networking top | 1 |

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To contact an Eaton salesperson or local distributor, please visit **Eaton.com/S-Series** or call **800-356-5794**.