



FP1191, 7 to 40Ahr Battery Restraint Kit Installation Instructions

1. General Description

To ensure all New Zealand installed Control and Indicating Equipment (CIE) comply with NZS4219:2009 clause 5.12, seismic battery restraint requirements, all 7 to 40Ahr batteries must be seismically restrained.

These instructions describe the installation of a battery restraint kit for pairs of 7 to 40Ahr batteries in NZ Control and Indicating Equipment (CIE).

The Battery Restraint Kit consists of 50mm wide permanent adhesive Velcro tape and an instruction label to be fitted inside the CIE cabinet.

The methods of seismic battery restraint detailed in this literature have been tested and found to comply with NZS4219:2009 clause 5.12, battery restraint requirements.

2. Kit Contents

Each kit contains:

- 1 x LB0715, Seismic Battery Restraint Label,
- 1m x SU0390 50mm wide Velcro Tape.
- 1 x LT0744, these installation instructions.

3. Battery Restraining in NZ Control and Indicating Equipment (CIE)

Batteries are seismically restrained by applying lengths of 50mm wide permanent adhesive Velcro tape to the base of batteries and a mating length to the inside floor of the CIE cabinet. The Seismic Battery Restraint Label LB0715 provided is fixed to the inside rear wall of CIE cabinet to bring attention to the need for replacement batteries to be seismically restrained.

Refer to the step 4 for details on attaching Velcro tape to various battery sizes.

Refer to the step 5 for details on attaching Velcro tape to the inside floor of various NZ CIE cabinets.

Refer to the step 6 for details on attaching the Seismic Battery Restraint Label to the inside wall of various NZ CIE cabinets.

Ensure the base of batteries and the inside floor of the CIE cabinets are clean, free of dirt and swarf before applying Velcro tape.

Once the Velcro tape has been attached to the batteries and to the inside floor of the cabinet, and the Seismic Battery Restraint Label has been fitted, place the batteries inside the cabinet ensuring there is a min of 10mm space between the batteries.

If 2 pairs of 40Ahr batteries are to be stacked in an 18, 28U or 40U cabinet a Battery Restraining Bracket FP1192 should be used. Refer to installation literature LT0745.

4. Battery Velcro Tape Attachment

Lengths of 50mm wide male (hook) Velcro tape are attached to the base of batteries as shown in Figure 1 below.

Cut lengths of male Velcro tape and attached to the base of the batteries across the depth, butting the lengths together. Ensure the tape is positioned at the centre of the batteries.

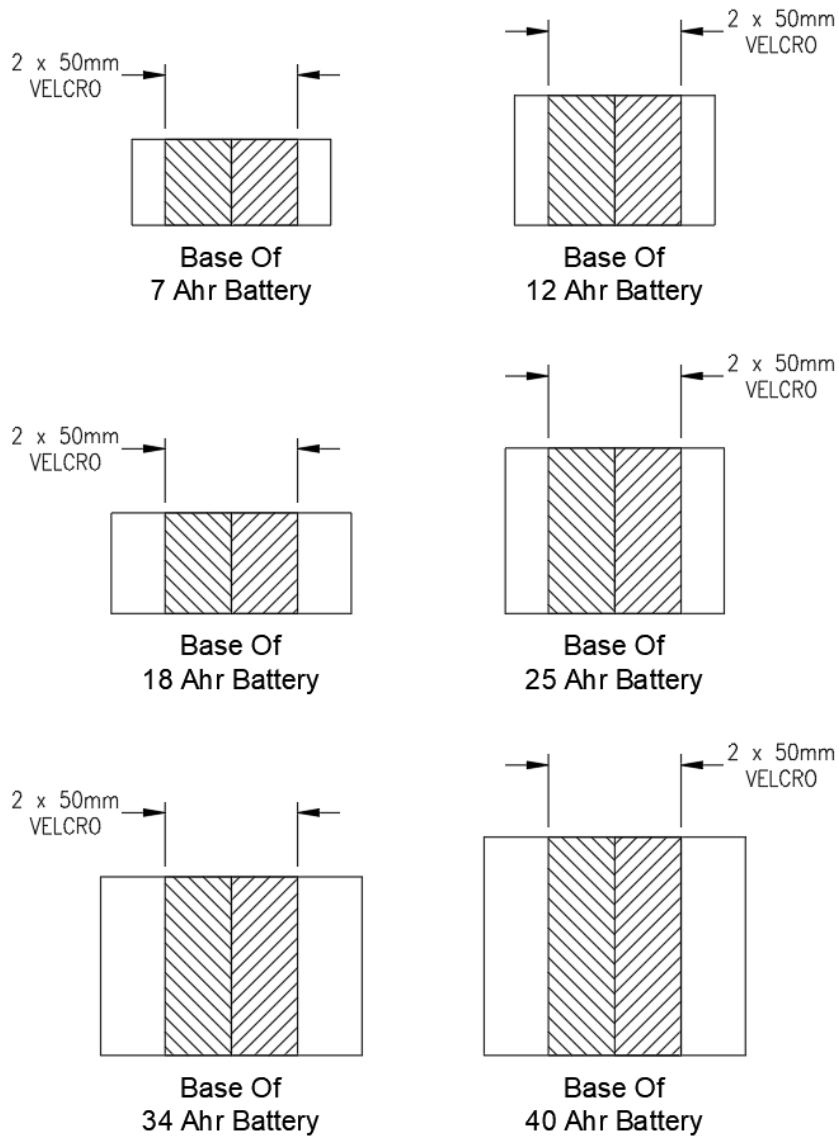


Figure 1 – Velcro Tape Battery Attachment

5. CIE Cabinet Velcro Tape Attachment

Length(s) of 50mm wide female (loop) Velcro tape are attached to the inside floor of the various NZ CIE cabinets as shown in Figures 2.1 and 2.2 below.

Cut lengths of female Velcro tape and attached to the inside floor of the CIE cabinet, across the width. If 2 lengths of Velcro tape are required butt the lengths together. Ensure the tape is positioned to avoid any cabinet cable entry points.

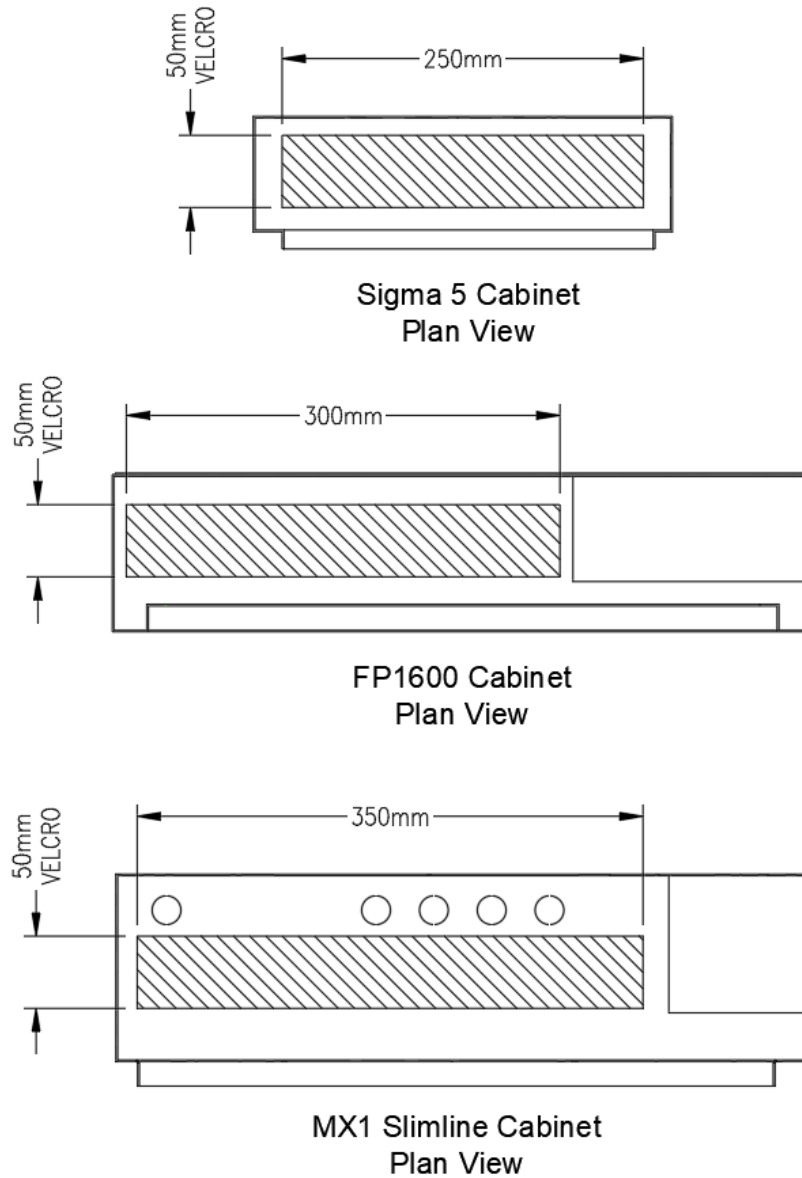


Figure 2.1 – Single Velcro Tape Cabinet Attachment

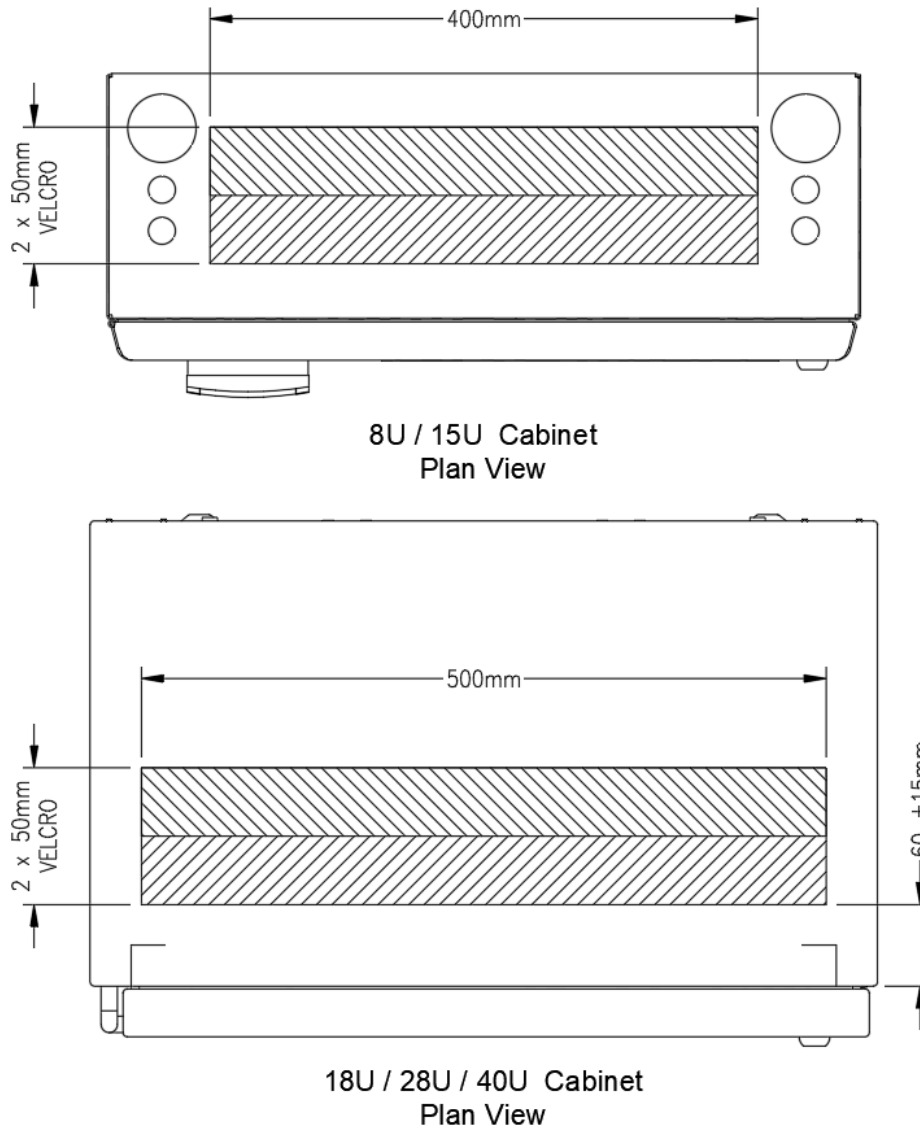


Figure 2.2 – Double Velcro Tape Cabinet Attachment

6. Seismic Battery Restraint Label Attachment

The Seismic Battery Restraint Label LB0715 provided is fixed to the inside rear wall of CIE cabinet to bring attention to the need for replacement batteries to be seismically restrained.

Select a suitable location of the label and fix in place.

Examples are shown in Figures 3.1 and 3.2 below.



Figure 3.1 – Battery Restraint Label Fitted Inside an MX1 Slimline Panel

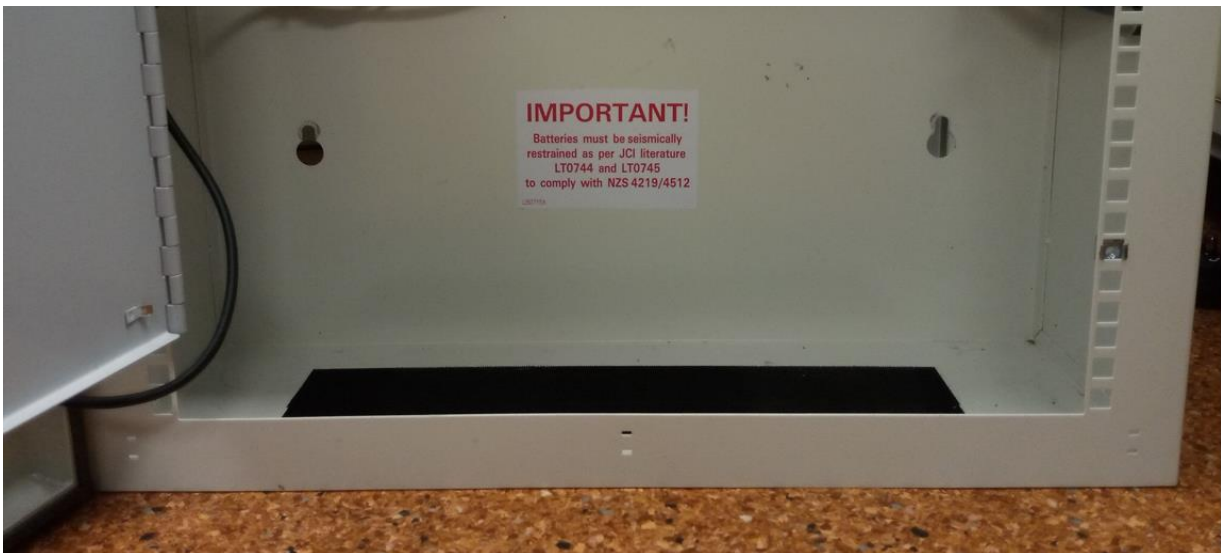


Figure 3.2 – Battery Restraint Label Fitted Inside an MX1 15U Panel