

Electrical & Computer Access Floor Box

47 (2008)

This type of electrical and computer access floor box is becoming more popular in buildings at the University due to their versatility. They provide a safe and tidy below floor access for up to 6 General Purpose Outlets (GPO's) as well as voice/data outlet for computer network access. Wall and ceiling mounted box designs are starting to be found, although usually only in recently constructed or recently refurbished seminar and lecture areas.

A recent electrical incident involving this type of floor box (similar to Fig 1 below) resulted in the lid shearing off an electrical cable and loss of electrical power.



Fig 1 Guillotine point

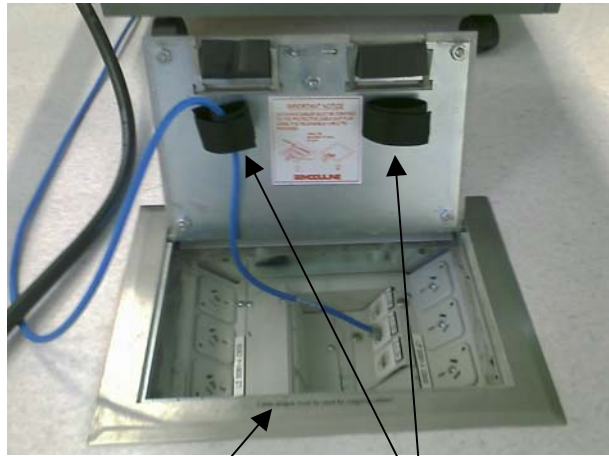


Fig 2 Instruction label and Velcro straps

Operationally, users of the floor box need to safely direct their electrical equipments wiring correctly through the floor box lids cable exit flaps. Guiding all associated equipment wiring out of the lid through the twin cable exit flaps, is necessary for wiring protection and to allow the lid to close flush.

To reduce the risk of repeating this incident the following safe work practices and preventative measures should be undertaken:

- ensure that all touchable metal surfaces have a reference to Earth,
- the installation of Velcro straps (as shown in Fig 2) onto the under-side of the lid adjacent to the twin cable exit flaps, to guide cabling toward the direction of the exit flaps to assist/prevent cables being trapped before closing the access lid,
- affix a label as shown in Fig 2 onto the outer edge of the housing indicating, **'Cable strap/s must be used for outgoing cables!'**,
- training/awareness in the safe use of the floor box and electrical equipment,
- inclusion of a floor box written instructional guideline, be provided with area access key and facilities IT usage manual,
- consider installation of floor box types constructed with a plastic lid,
- other options that may be suitable, contact the OHS Branch.