



HEALTH, SAFETY AND EMERGENCY MANAGEMENT

Promoting a safer place to work and study

SAFETY ALERT

Concealed Electrical Cables

Who needs to read this?

Contractors and Curtin staff who are undertaking drilling or construction works.

Background Details

During recent works there have been several incidents where contractors have drilled into concealed electric cables in metallic door frames, in particular fire rated door frames.

Incident 1

During the installation of a new 'door closer' a screw was drilled into a low voltage energised electrical cable located within the metal door frame, resulting in the doorframe becoming 'live'. The contractor then commenced the installation of an 'access control panel' in the same door. During this process he attempted to retrieve a screw from the ground, while maintaining his balance by resting a hand on the metal doorframe. On touching the doorframe and the ground at the same time, the contractor received a mild 'electric shock' through his hand.



Incident 2

In a similar incident, sparks were emitted from the penetration point while drilling into concealed electrical cable in another metal doorframe.





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Recommendations

- Complete a Job Safety Analysis (JSA) for the work.
- Obtain 'As Constructed' drawings prior commencement of work to assist in identifying potential location of cables.
- Use location and detection equipment, inspection points and telescopic viewing aids to identify the presence of concealed services, electric, gas, water etc. and magnets for the detection of copper piping for gas or water services where appropriate.
- Use Personal Protective Clothing and Equipment such as insulated gloves, rubber soled boots, induction wands, fibreglass ladders, low speed battery operated drills.

Who do we call with questions?

If you have any queries regarding electrical safety requirements at Curtin, please contact your Curtin Project Manager or Curtin's Electrical Operations team on 2020.

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