

## **GARAGE DOOR SAFETY INCIDENTS.**

**This newsletter lists a number of garage door safety incidents to highlight what can go wrong and what can be learnt from those incidents.**

THE FIRST 3 INCIDENTS REPORTED BELOW HAVE BEEN SUMMARISED FROM B&D DOORS & OPENERS SAFETY ALERTS, WITH THEIR KIND PERMISSION. FOR THE FULL WORDING OF THE INDIVIDUAL INCIDENT REPORT PLEASE CONTACT AGDA OR B&D DIRECT.

THE PURPOSE OF SUCH SAFETY ALERTS IS TO SHARE SAFETY RELATED INFORMATION AND RAISE AWARENESS OF POTENTIAL INCREASED RISK SITUATIONS OR ACTIVITIES, AND NOT INTENDED AS REPLACEMENT FOR SYSTEMATIC HAZARD IDENTIFICATION AND CONTROL.

### **!! ELECTROCUTION RISK !!**

#### **Exposed Electrical Wire - Incident Summary**

- An installer was in the process of installing a door at domestic building site. The power board and the electrical wiring had been installed in the house however some of the ends were exposed for the wiring for the Door.
- As the Installer was positioning a guide into place he felt a "Tickle" in his hand. He immediately stopped what he was doing and turned the electricity off at the main power board.
- Other workers at the Site required the power on, the installer was placed in a position where he turned the power back on, and the installer then incorrectly tested the wires to ascertain whether they were live by touching the wires to a guide. This caused an arc and tripped the site RCD's.
- The Installer then taped up the wiring and completed the installation of the door.
- The installer did not sustain any injuries as a result of this incident.



EXPOSED WIRES PRIOR TO BEING TAPED UP AND MADE SAFE.



EXPOSED WIRES SAFELY TAPED AND LOCATION OF WIRING IN RELATION TO THE DOOR BEING INSTALLED

#### **Key Learnings for all Installers and Dealers.**

- Performing SWMS (hazard identification) prior to commencing work to identify that the wiring was live.
- Do not be pressured to work with unsafe conditions

(exposed live electrical wires)

- Ensure that Installers have the authority to stop the job if the opening or services are not ready for installation.

### **DIY DOOR UNWRAPPING**

#### **Unwrapping Door - Incident Summary**

During a DIY Door installation the owner undid the wrapping on the door and upon doing so the door sheet sprang open, narrowly missing the owner and other parties assisting with the installation.

#### **Key Learnings from the investigations**

- While there was a warning sign on the door itself, the outside box did not have the warning sign indicating:
  - ~ Not to cut the strapping or plastic until instructed to do so
  - ~ Where to get information on installing the Door
- Suppliers must provide information on how to install Doors to DIY installers when selling the product without installation services.
- To ensure safe installation DIY installers should be encouraged to read the relevant installation manual and safety checklist also available from manufacturers directly or from their website.

### **CASES OF BRACKET/FASTENER FAILURE**

#### **Falling Door - Incident Summary (1<sup>st</sup> incident)**

The home owner had just opened the door from the outside and was moving into the garage when the door fell onto him. The garage door had recently been replaced by a new door. The installer had used the existing brackets, as can be seen in the photograph, the bracket was still attached to the axle, as it had pulled out of the wall.

VIEW OF THE DOOR AND ATTACHED BRACKET



#### **Key Learnings**

- Installers must follow the manufacturer's installation instructions to install a Door or Opener.
- Installers must utilise the correct fixings to attach the brackets as per the manufacturer's installation instructions for doors and openers.

#### **Bracket Screw Failure- Incident Summary (2<sup>nd</sup> incident)**

Consumer contact to AGDA asked "We had a garage door installed about 5 years ago and unfortunately the spring which was mounted to our garage brick wall was installed using the wrong size screws and it has come off the wall and damaged the garage door and brick work on our garage.

*I was wondering if there is a certain size of screws that they need to use when installing garage doors for safety reasons?"*

#### **Key Learnings**

- The screws were considerably smaller than those recommended in the manufacturer's instructions
- The undersized screws had been 'worked' by the door operation over 5 years and in combination with cracking

failure of the bricks, caused the screw fasteners to fail.

- The force of the stored energy in the spring made the spring assembly strike the door damaging it.



VIEW OF THE SPRING ASSEMBLY  
AFTER STRIKING DOOR

VIEW OF CRACKED BRICKWORK

- all fixings (including screws) should be installed

as per manufacturer's specifications which in relation to screws such specifications can be a specific type and dimension of screw or by specifying the design force they are required to satisfy.

### Bracket Screw Failure- Incident Summary (3<sup>rd</sup> incident)

A woman raised the roller door for her garage to enable a family member to remove their car from the garage. She waited beneath the door during this operation so that she could close the door and re-lock it after the car had been removed. While she was standing under the door, one of the brackets supporting the door came away from the surrounding brick wall. The door fell, striking her on the head and causing personal injury.

#### Key Learnings

- Coach screws with plastic plugs were used at variance to the manufacturer's recommended Loxin (or Dynabolt type) masonry anchor into brick substrate.
- Over time owner had become aware of door bracket becoming looser but no action initiated to have maintenance undertaken.
  - ~ AGDA recommends garage doors be serviced by a professional garage door technician every 12 months or earlier as conditions may require.
- All fixings (including screws) should be installed as per manufacturer's specifications which in relation to screws such specifications can be a specific type and dimension of screw or by specifying the design force they are required to satisfy.
- Manufacturer specifications should be very clear and unambiguous. AGDA recommends garage doors be serviced by a professional garage door technician every 12 months or earlier as conditions may require.

## CHILD ENTRAPMENT

### Incident Summary (1<sup>st</sup> incident)

A two year old child was trapped under a closing, automatically operated sectional door. The mother was initially unable to release the child and had to retrieve the remote and free the child who was by then unconscious. The mother, a nurse, then had to perform CPR to revive the child who was taken to hospital. He has since been released but had sustained some severe bruising.

#### Key Learnings

- The child was not observed being in the vicinity of the

closing Door.

- The mother was not aware of the manual release mechanism on the door.
- The door opener did not reverse on coming into contact with an object (in this case the child) and under separately conducted NATA test conditions was shown to fail the reversing test on coming into contact with an object as required by the Australian Standard.
- The owners of a garage door should be made aware of the need to keep children away from a moving garage door and how to operate the manual release system.
  - ~ Safety manuals and instructions should be made available to the owner(s)
  - ~ Safety labels should be affixed near the door to increase child safety awareness.
- Garage door openers installed should comply with Standards requirements to satisfy automatically reversing test on coming into contact with an object.
- Additional safety measures such as PE beams should be considered to increase safety.

### Incident Summary (2<sup>nd</sup> incident)

A 19 month old child was knocked to ground by sectional door with sufficient force, before reversing, to render him unconscious and not responsive for 3 minutes – mother kept on pressing remote, eventually got him from under the door and brought him round and he is OK now.

#### Key Learnings

- Garage door did not initially reverse which may have been contributed to by his wife repeatedly pressing any or all of the buttons on the remote.
- Mother was not aware the manual release handle may have been an option to get the child from under the door.
- The child was not observed being in the vicinity of the closing Door.
- The owners of a garage door should be made aware of the need to keep children away from a moving garage door and how to operate the manual release system.
  - ~ Safety manuals and instructions should be made available to the owner(s)
  - ~ Safety labels should be affixed near the door to increase child safety awareness.
- Owner believed the door setting adjustment was set at too high a force contributing to the incident
  - ~ Owner recommended industry clarify if operating buttons (remote or wall) interfere with the auto reverse function and take steps to amend Standards that operating buttons (remote or wall) do not interfere with the auto reverse function.
  - ~ Owner recommended industry take steps to amend Standards by specifying a maximum closing force pressures.
  - ~ Owner recommended industry consider the need for installer training to be upgraded at entry to the industry and a system of adequate communication and / or training with the changes in technology of newer drives and any consequent changes in installation practice.
- Additional safety measures such as PE beams should be considered to increase safety.

## NEW DEALER MEMBER

We welcome as a dealer member **PT Doors** of **Panania** NSW, operated by Lesley, Karina and Peter Traill.