



Defence  
Infrastructure  
Organisation

# Safety Alert

# Part A

**Subject: Vertical Industrial Door Critical Component Failure**

**Number: SA 2018/06**

**DIO Sponsor:** Bryan Dunn

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**This Safety Alert is to be read by the following so appropriate action can be taken:**

- 1. DIO Service Manager (or equivalent for non-NGEC contracts)**
- 2. DIO's Maintenance Management Organisations**
- 3. Others**

**Others interested in the content of this Safety Alert might include:**

Heads of Establishments, Prime Contractors, Private Finance Initiatives, Public-Private Partnership and other traditionally procured contracts, Infrastructure Managers and Property Managers with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs), Health & Safety Advisors.

**When it takes effect:** immediately

**When it is due to expire:** When updated or rescinded.

Health and Safety

This Safety Alert does not necessarily cover all aspects of the subject matter and readers should make themselves aware of other potential issues. Readers should also not rely on DIO publications as their only means of becoming aware of safety, operational or technical issues, but they should consult widely across other media to maintain awareness.

## **Aim**

1. To bring to the attention of appropriate persons the risks associated with vertical doors and shutters, and to highlight the importance of Planned Preventative Maintenance (PPM) to ensure that safety devices, where fitted, will operate correctly in the event of a critical component failure. This alert also highlights the need for vigilance when completing PPM to identify the absence of anti-fall devices, the fitment of non-standard parts, or unapproved modifications, that could adversely affect safety. Additionally, to ensure that where issues are identified they are promptly reported to the appropriate persons, including HoE, and that suitable and sufficient risk assessments are undertaken and appropriate risk mitigation put in place.

## **Introduction**

2. Compliance with the contents of this Alert will enable compliance with the Health & Safety at Work etc. Act 1974 and its subordinate Regulations.
3. The appropriate MOD officer shall arrange for the Maintenance Management Organisation (MMO) contractor to carry out all actions in accordance with this Safety Alert.
4. Any work required because of this Safety Alert must be carried out in accordance with JSP 375 Part 2 Volume 3 – High Risk Activities on the Defence Estate.
5. On MOD Establishments occupied by United States Visiting Forces (USVF) responsibility is jointly held by USVF and DIO(USF). At base level this jointly managed organisation is to take appropriate action to implement the contents of this Alert. Where this Alert contains procedures, which differ significantly from USVF practice a DIO (USF) code of practice will be issued.

## **Background**

6. British Standard BS EN 12604, concerning Industrial, commercial and garage doors and gates was published in April 2000 which set the requirement to fit anti-drop devices to all new relevant doors and shutters. It is likely that many vertical doors and shutters across the Defence Estate were manufactured or installed prior to the release of BS EN 12604 – 2000 and will therefore potentially have no form of anti-drop mechanism incorporated in their design or installation.
7. Vertical industrial, commercial and roller shutter doors can pose health and safety risks and have been the cause of a number of serious and fatal accidents resulting in several recommendations by the Health and Safety Executive (HSE). These recommendations include fitting anti-drop mechanisms to prevent uncontrolled dropping of doors and shutters in the event of critical component failure. Safeguarding against dropping can be achieved by fitting an anti-drop device or by other design features incorporated into the system.
8. Whilst fitting anti-drop devices is the preferred engineering solution where doors are not designed with anti-fall features, not all existing doors can be retrofitted and other forms of risk management need to be considered and applied.

## **Requirement**

9. All vertical doors and shutters should be subject to PPM. This maintenance, including inspection and testing should be kept up to date. Additionally, they should be subject to annual competent person inspections, which should provide a full condition report, identifying that the equipment is safe for continued use, or otherwise, and give details of any faults or defects requiring rectification prior to it being safe for continued use.
10. Those undertaking PPM must be vigilant in identifying unapproved modifications, the fitment of non-standard components or where safety devices are fitted have not been damaged or defeated. The absence of anti-fall devices or other anti-fall design features should also be noted and recorded.

11. Any work incurring expenditure of MOD funding requires appropriate authority from the MOD officer responsible for the establishment.

## Part A

12. Where vertical doors and shutters are present on the estate, responsible persons are to assure themselves that a suitable and sufficient risk assessment is in place for their operation and use. This risk assessment should be reviewed when additional information is available regarding equipment condition, serviceability, or any change in use of vertical door or shutters. Additional guidance can be found at Annex A to this Safety Alert.

13. Where risk assessments identify residual risks, which are not as low as reasonably practicable (ALARP), consideration must be given to taking the equipment out of use until suitable mitigation or other controls are in place.

14. The MMO, on direction from the DIO Service Manager or Equivalent, shall initiate the following tasks:

- a. Identify all locations where vertical door systems or shutters are installed.
- b. Confirm that they are recorded correctly on the asset register and are subject to an appropriate PPM schedule and the maintenance, inspection and testing is in date.
- c. All vertical door or shutter systems should be inspected at the earliest reasonable opportunity<sup>1</sup> and the presence or otherwise of anti-fall devices or other appropriate features is identified and their serviceability recorded. The Inspections should identify any risks that may prevent safe operation, maintenance or repair. The inspection record should also note relevant information from the manufacturers identification and data plate, including manufacturer, model and serial number and any CE marking.
- d. Where no anti-fall device is fitted, the inspection report is to advise if the door or shutter can be retrofitted with a compliant anti-fall device.

15. The MMO is to notify the DIO Service Manager, HoE and establishment 4Cs Duty Holder of any vertical door system or shutter that is not fitted with an anti-fall device; the 4Cs risk register should be suitably annotated and local risk assessments reviewed.

16. The MMO is to notify the DIO Service Delivery Performance Management Team, DIO SD-Perf Mgt Team (MULTIUSER) account, through their respective DIO Service Manager identifying the location, quantity and model number of vertical door systems, shutters, identifying date of last inspection, maintenance and testing; advising if the equipment is CE marked and if fitted with anti-fall device. Where no anti-fall device is fitted, the ability to retrofit or otherwise should be confirmed. The HOE should be notified where unrecorded or unmaintained vertical doors or shutters are identified. **A nil return is required from Establishments with no vertical doors systems or shutters.**

17. Upon receipt of information from MMO, the HoE may need to review risk assessments considering any new information or previously unidentified risk. Support to undertake suitable and sufficient risk assessments may be obtained from respective TLB Chief Environment and Safety Officers (CESOs), or alternatively through DIO Regional Health and Safety Support Team.

18. The data requested at paragraphs 14 - 16 is required by 31 January 2019 and will be reviewed on the 11th February 2019.

19. Further information will follow with the issue of **Part B** to this Safety Alert once the extent and scope of the affected estate has been established. Where urgent operational requirements necessitate remedial actions before this timeline, the HoE should liaise with local DIO Infrastructure team to effect repairs. Where work orders are raised, this information should be included in the data reported under Para 18 above.

20. The contents of this Alert should be considered when undertaking Technical Inspections or Appraisals of this type of asset.

End

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<sup>1</sup> The next scheduled maintenance activity should be considered as a "no later than" date.

## Risk Assessment

The detailed inspection and subsequent risk assessment should consider the requirements of this Safety Alert and Annex and must be carried out by a suitable competent person.

The requirements to undertake risk assessment applies to both manual or power operated vertical industrial doors or shutters.

The Risk Assessment should consider, but not be limited to the following:

- a. Design construction of the door/shutter under assessment:
  - i. Does it have the information available to be able to assess if it meets any of the EU / CE Marking Standards or Regulations?
  - ii. Is a data-plate fitted, and does it indicate door or shutter constructed to a relevant British Standard etc?
  - iii. Is the door/shutter provided with mechanical protection and protection against unintentional and uncontrolled movements?
  - iv. Manual operation of the doors/shutter, is the force required to operate the door/shutter excessive?
  - v. Doors/shutters operated by gravity or other self-closing mechanism, are they fit for purpose?
  - vi. Does the door/shutter have an appropriate Planned Preventive Maintenance program in place?
- b. What is the primary use of the door/shutter?
  - i. Pedestrian traffic?
  - ii. Vehicular traffic including Mechanical Handling Equipment?
  - iii. Mixed pedestrian/vehicular?
    - Is alternative access available?
    - Could a pedestrian access (pass) door be inserted into the main door leaf/shutter to reduce number of operations?
  - iv. Who is going to operate the door/shutter?
  - v. How is the door/shutter going to be operated?
  - vi. What is the frequency of use and speed of operation?
  - vii. How is the safety of users to be ensured?
  - viii. How is the safety of others who may be in the area ensured?
- c. Training requirements of the operators and users:
  - i. What training have the operators of the door/shutter received?
  - ii. What procedures are in place for the safe operation of the door/shutter?
  - iii. Have operators been trained in emergency operation/release of power operated doors or shutters?
- d. Signage, hazardous area line marking to protect person and vehicles highlighting hazardous areas when in use, are these in place for the door/shutter?
  - i. Are appropriate signage and warning labels prominently displayed and in good condition?
- e. Doors/shutters adjacent to traffic areas, are there any controls required to ensure the interaction to this is appropriately controlled?
- f. Pass doors (Step through doors installed on a vertical door opening) are they fitted and safe, or do they require fitting to reduce the hazards?