



Permanently Installed Rope Access and Industrial Fall-Arrest Systems



HAZARD

The Department of Labour is currently investigating a complaint about the adequacy of the above systems (including the anchorage points) on a number of Wellington buildings.

While the investigation is still underway, this Alert provides **interim advice** to building owners, building managers and users about the need to have suitable systems to ensure the safe performance of this safety critical equipment. The safety of the person using these systems relies on all parties involved carrying out their work in a proper manner.

IF YOU ARE A BUILDING OWNER AND/OR BUILDING MANAGER

If you are the owner of a building or building manager where the above systems are installed, it is important that your building management systems ensure that the following areas are addressed:

DESIGN OF THE SYSTEMS

You should check:

- That the systems have been originally designed and/or assessed by an engineer and certified that they, including the type of anchorage being used, are suitable for the intended use.

The systems must be designed using sound engineering principles and following the relevant Standards. The design should consider the environmental factors such as coastal area and high toxicity atmospheres that may affect the system.

Anchors should be designed so they can be totally inspected on a 12 monthly basis so cavities or tubing can be inspected for corrosion.

Consideration should be given to the positioning of anchors to give the best access and avoid potential hazards to users. If possible ensure the end user of the systems is consulted.

Records should be kept of the design, design considerations, and "as installed" plans for reference by later users.

INSTALLATION OF SYSTEM HARDWARE

You should check:

- That an engineer assessed and certified the type of anchorage used before and after it was installed and that the system passed any required testing after installation.
- That at every permanently installed anchorage there is a permanently fixed plate identifying the installer and load that can be applied, the anchors unique number and the next inspection date.

Installation is a critical part of the overall system as the best designed system will fail if installed inadequately. In particular anchorage must be installed in accordance with the manufacturer's instruction and/or designers criteria and the overall system design. All installations should consider the relevant building codes as penetration of the structure could degrade building strength.

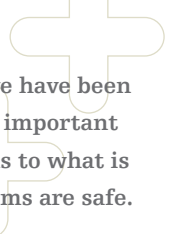
TESTING AND INSPECTION

Testing and inspection must be carried out by persons who are competent and able to demonstrate adequate training and experience of anchorage systems. Testers and inspectors should be able to show that their equipment is calibrated, maintained and be able to demonstrate good quality assurance systems and processes to ensure a consistent approach.

You should check:

- That all anchorages have been inspected and tested, where required, at least every 12 months in accordance with the Standards or as specified by the design engineer or manufacturer of the equipment.
- That where practicable, at each permanently installed anchorage there should be a permanently fixed plate identifying the last time the anchor was tested and labelled as safe.
- That there should be a log of all testing and verification for all permanent anchorage points.
- That the inspection work has been carried out in accordance with the Standards
- That the inspecting company is able to demonstrate they have the systems, competent staff and suitable equipment to carry out the work.

If you are unable to verify that the steps above have been taken then before the equipment is used it is important that you get expert advice from an engineer as to what is necessary to be able to confirm that the systems are safe.





The manufacturer and designer should ensure that each attachment is uniquely identified so the installation, testing and maintenance can be tracked during its life. Anchorage systems are subject to environmental and other working stress during their life. They are also reliant on the condition of the material they are installed into, hence the inspection and testing regime should consider all these factors. Maintenance procedures should be specified by the designer as to the expected life of the system.

IF YOU ARE A USER OF ANCHORAGE SYSTEMS TO CARRY OUT WORK

You should:

- Follow the procedure and checks listed in the New Zealand Standards and industry Codes of Practice

If you are unable to verify that the system has been safely designed, installed and examined as required then before you use it you should get suitable confirmation from the building owner that the systems are safe and fit for use.

The relevant Australia/New Zealand Standards that apply are:

- AS/NZ1891.4:2009 – *Industrial fall-arrest systems and devices – Part 4: Selection, use and maintenance*
- AS/NZ4488.1:1997 – *Industrial rope access systems – Part 1: Specifications*
- AS/NZ4488.2:1997 – *Industrial rope access systems – Part 2: Selection, use and maintenance*

Information is also available at the Industrial Rope Access Association of New Zealand – www.iraanz.co.nz

An industry Code of Practice is available at the international Industrial Rope Access Trade Association website – www.irata.org/publications.htm

Note: This material has been prepared using the best information available to the Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.

