

sound for a period of at least five seconds and be repeated every minute.

Moreover, if the LSS is triggered while the work platform is stationary, it should prevent all movement of the work on the platform. Movement should only restart if the overload is removed.

Under the Australian New Zealand Standard AS/NZS1418 10:2011, it is a requirement that all applicable mobile elevating work platforms are fitted with LSS systems, or meet the enhanced overload and stability criteria. This took effect for all new machines being built and imported into Australia and New Zealand from May 2011.

HYBRID AND FULLY ELECTRIC MACHINERY

Hybrid machinery employ a combination of two different power sources. For machinery in the construction industry today, those two sources are most often diesel and electric e.g. a small diesel engine with a generator and battery drive.

Hybrid machinery offer the same productive operation as a diesel unit, but with the benefit of offering extended operating intervals indoors under battery power. This could be beneficial when workers are required to reach and conduct work at heights

inside buildings for an extended period. Additionally, diesel-electric systems reduce fuel consumption and emissions.

Some equipment manufacturers are also now producing and distributing fully electric machinery. These machines are being selected as they produce low noise levels and zero emissions - which are ideal for sensitive areas such as interior spaces or inner-city construction sites with emission and noise restrictions.

REMOTE CONTROLLED EQUIPMENT

New technologies also allow users to drive, steer and load stowed scissor lifts by using applications on mobile devices.

These applications are designed to enable better visibility from possible obstructions while users can maintain a safe distance from the machine, as well as alleviating some of the hassles that can be experienced while loading/unloading machines for transport.

Sources: Equipment Insight, J.P. Morgan; Scissor lift - VR Simulator, Industrial Training International; Advantages of virtual reality training, Virtual Reality Society; Load Sensing Systems, EWPA; Inspector guide – Mobile and operational plant – elevating work platforms, Queensland Government

PROFILE

HIJSEN GAINS ACCESS IN HARD TO REACH AREA

Bowen Hills Multi Level Residence is a seven storey building, located in Brisbane's inner-city suburb of Bowen Hills.

At the residences, a soffit on a 10 storey building needed repairing but was located in a hard to reach area. RJC Builders considered gaining access from outside the building using a 55 metre travel tower or a crane with a man cage. However, this would have required road closures, a 130 tonne crane and additional man hours.

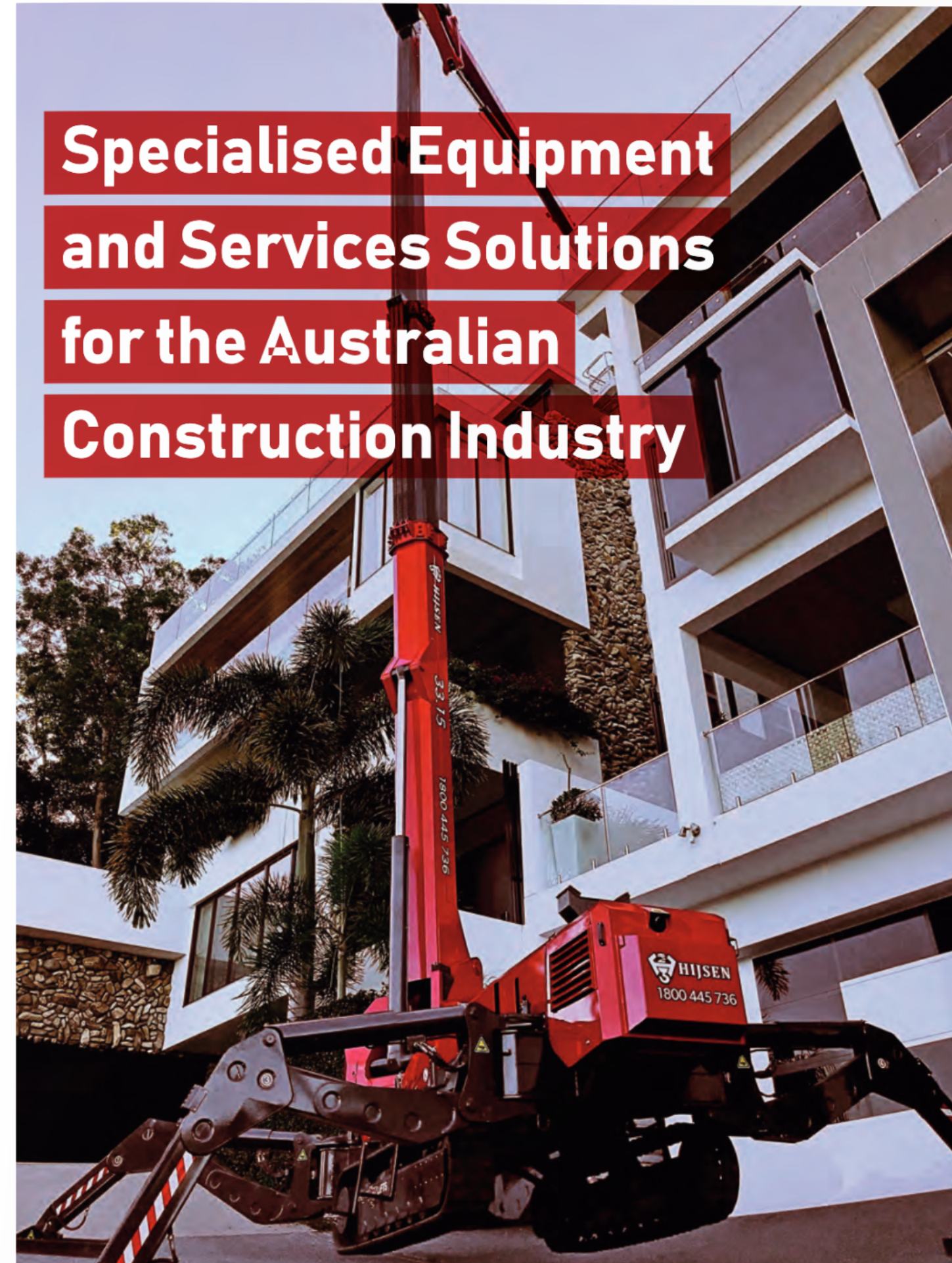
Hijsen were engaged by RJC Builders to provide site inspections and recommendations of methodology using the specialised equipment. Hijsen's solution had to safely lift two people to a height of 24m and reach out at least 12m.

The equipment was safely mobilised through the building's two level car park, despite height restrictions of under 2.1m and width restriction of 2m. Subsequently, the equipment tracked up two levels and entered through a two metre high gate where it had to turn almost 90 degrees as it entered.

Due to the building's suspended slab, there were weight and distribution restrictions that Hijsen needed to carefully consider. Hijsen provided the client with evidence that the weight and distribution of weight was according to the building's load bearing pressures and point loadings, as well as the engineer's requirements.

A standard self-propelled elevated work platform to perform this task, would not have been within tolerance of the slab as they typically weigh between 15 and 18 tonnes. However, Hijsen's equipment, weighing only 7.2 tonnes spread over six metres with outrigger boards, meant pressure could be decreased over a larger surface area, allowing it to gain access safely.

The job was completed with minimised disruption to residents since Hijsen could create exclusion zones around the working area. Hijsen also achieved noise reduction as the equipment was powered by lithium battery, which also eliminated emissions. Works were completed within six hours and was the most economical solution presented.



1800 445 736
jim@hijsen.com.au
www.hijsen.com.au

Hijsen is a specialised equipment and services provider focused on customer satisfaction and safe solutions. Complementing its fleet of specialised access equipment (spider lifts), Hijsen has now introduced its 2019 model Liebherr 1070 4.2 - 70t mobile crane.

Hijsen's portfolio of completed projects include relocations, installations, demolition, telecommunications, roofing and cleaning services to name just a few. Hijsen understands that being a service based wet and dry hire company requires commitment to communication, safety, preparation and delivery.

Our experienced team are always searching for improvements and efficiencies to not only improve the bottom line for our clients, but improve productivity through innovation. With a professional approach to high risk work environments, Hijsen invests in delivering safe, compliant and economical solutions to almost all sectors of industry for any specialised lifting and access needs.

