


ACCESSIBLE GOODS ONLY LIFTS (AGOL'S)

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A photograph of a warning sign mounted on a metal surface. The sign is rectangular and white with red text. Above the sign, there are wooden planks and some white fabric or plastic material. Below the sign, some metal chains or cables are visible.

PERSONS ARE FORBIDDEN
TO ENTER THE LIFT
CAR OR ENCLOSURE



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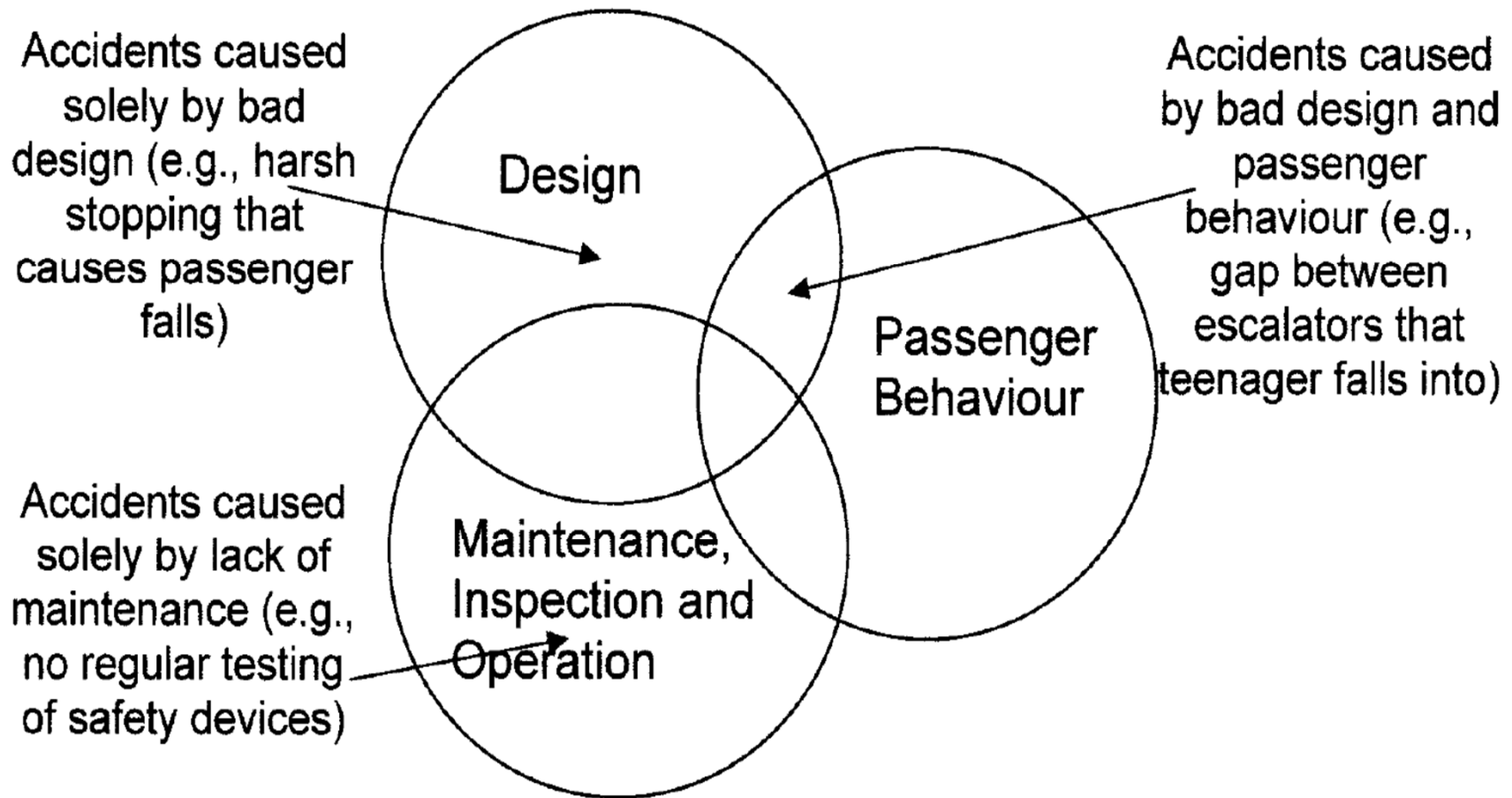
Technical Warning Notice

Subject: Accessible Goods-Only Lifts (AGOLs) with no safety gear

Introduction

We are aware of a number of incidents on Accessible Goods-Only Lifts (AGOLs) with lift cars/carriers not fitted with safety gear. Safety gears are almost universally fitted to lift cars/carriers which are suspended by ropes, chains, flat belts etc to prevent free-fall and uncontrolled movement when tripped by suitable actuation means.

AGOLs not fitted with protection against free-fall and uncontrolled movement pose obvious risks to the safety of those who might enter the carrier for loading/unloading or those who might access the carrier or lift well as part of maintenance or thorough examination.



Accidents caused solely by bad design (e.g., harsh stopping that causes passenger falls)

Design

Accidents caused by bad design and passenger behaviour (e.g., gap between escalators that teenager falls into)

Passenger Behaviour

Accidents caused solely by lack of maintenance (e.g., no regular testing of safety devices)

Maintenance, Inspection and Operation



STRIPPERS

I'M
GOING TO
SIT ON YOUR
LAP, BUT
YOU CAN'T
TOUCH
ME.

CATS

THE LAW AND LIFTING APPLIANCES

LIFTING OPERATIONS & LIFTING EQUIPMENT REGS

- The Lifting Operations & Lifting Equipment Regulations 1998 (LOLER) states in Regulation 5(1)(c) *“Every employer shall ensure that lifting equipment for lifting persons has suitable devices to prevent the risk of a carrier falling”*
- The question that then arises is to whether this clause applies to AGOL’s as they are intended to move goods only and the clause specifically states *“for lifting persons”*

THE LAW & LIFTING APPLIANCES

SUPPLY OF MACHINERY (SAFETY) REGS

- Following the introduction of the Supply of machinery (Safety) Regulations 1992 which enacted the 1992 Machinery Directive the Essential Health & Safety Requirements (EHSR's) of these Regulations set out a clause (4.1.2.6) which required machinery such as lifts to be designed and constructed so that loads could not creep dangerously, fall freely or fall unexpectedly.
- In December 2009 the Supply of machinery (safety) Regulations 2008 replaced the 1992 version. Clause 4.1.2.6 remained similar but clause 4.1.2.8.2 required *“that where persons have access to the carrier, the machinery must be designed and constructed in such a way as to ensure that the carrier remains stationary during access, in particular whilst being loaded and unloaded”*

THE LAW & LIFTING APPLIANCES SUPPLY OF MACHINERY (SAFETY) REGS

From **29 December 2009**, the **Supply of Machinery (Safety) Regulations 2008** have applied enacting the latest EC Machinery Directive. The EHSRs of these regulations include the important general principle to consider *reasonably foreseeable misuse*. Further requirements were included including EHSR 1.3.9 to address the risks of uncontrolled movements; EHSR 4.1.2.6 was similar to the earlier regulations, and EHSR 4.1.2.8.2 required that where persons have access to the carrier, the machinery must be designed and constructed in such a way as to ensure that the carrier remains stationary during access, in particular while it is being loaded or unloaded.

THE LAW & LIFTING APPLIANCES PROVISION & USE OF WORK EQUIPMENT REGS

- During the process of maintaining an AGOL the maintenance operative will be protected by the Provision & Use of Work Equipment Regulations (PUWER).
- This, amongst other things, requires that the employer conduct a risk assessment to identify the hazards and determine what the risks associated with the equipment and its use are. It is anticipated that such a risk assessment would identify the obvious risk of free fall on some designs.

STANDARDS & AGOL'S

BS EN81-31

- In 2010 a harmonised standard was published for AGOL's (BS EN 81-31). This standard, whilst not law in itself, presumes conformity to the EHSR's of the Machinery Directive. This standard requires rope and chain suspended lifts to be fitted with means to prevent free fall and uncontrolled movement.

BRITISH STANDARD

BS EN 81-31:2010

Safety rules for the construction and installation of lifts — Lifts for the transport of goods only

Part 31: Accessible goods only lifts

ICS 91.140.90

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BSi
British Standards

STANDARDS & AGOL'S

BS EN81-31

5.6.2.1.2 Means shall be applied as specified in Table 3 to prevent uncontrolled movement of the load carrying unit from those positions where it needs to be accessed, including access for maintenance purposes either to the platform or to the roof.

Table 3 — Means against uncontrolled movements

Safeties	Downwards movement	Upwards movement	Creeping ^a	Overspeed
Safety gear	X	X	X ^b	X ^c
Clamping device	X		X ^b	
Pawl device	X	X	X ^b	
Rupture valve	X			X
Restrictor				X
Rope brake	X	X	X ^b	X ^c
Stops in the pit, with or without buffers	X ^d		X ^d	
^a Creeping only with hydraulic drives. ^b Tripped at landings. ^c In combination with an overspeed governor. ^d Only for uncontrolled movement from the lowest landing.				

WHAT ARE THE RISKS?

- The risks include:
 - Uncontrolled movement whilst boarding or alighting
 - Maintenance operative entrapment whilst undertaking maintenance
 - Uncontrolled descent or ascent whilst a person is in the car

SAMPLE DESCRIPTION OF AGOL WITH NO SAFETY GEAR

- It has two working cables and two safety cables (against breakage of the suspension organs) as well as a passenger compartment with guardrail, perimeter protections (facing) or cabin.





LEIA TECHNICAL NOTICE

Until 29 December 2009, it might have been arguable that SMSR 1992 did not require AGOLs with rope and chain suspension to have free fall protection on the basis that persons were prohibited from accessing the carrier.

From 30 December 2009, the new EHSRs and the publication of a harmonised standard to meet these should have clarified the need for prevention of free-fall and uncontrolled movement of AGOLs. Since then, any AGOL designed without safety gear would need to be based on a risk assessment showing how the EHSRs of SMSR are met.

LEIA TECHNICAL NOTICE

Existing AGOLs not fitted with prevention against free fall and uncontrolled movement

If any AGOL with suspension is encountered which is not fitted with prevention against free fall and uncontrolled movement, we strongly recommend the following.

- 1. The owner should have a risk assessment carried out on the use of the lift including loading and unloading the carrier, access for inspection and maintenance.** The owner might need the assistance of their lift maintenance contractor. If access to the carrier cannot be prevented (e.g. carrier not accessible as defined in BS EN 81-31) or inspection and maintenance cannot be done from outside the lift well, then the owner should put control measures in place pending remedial measures.
- 2. The competent person carrying out thorough examination should report a lack of suitable devices to prevent the risk of a carrier falling (as required by LOLER Reg 5) to the owner as a defect.** Regulation 5(1)(c) of LOLER includes: *Every employer shall ensure that lifting equipment for lifting persons...has suitable devices to prevent the risk of a carrier falling.* We believe that this applies to a carrier suspended by ropes, chains or belts etc where a user enters the carrier for loading/unloading or where a person accesses or travels on the carrier as part of maintenance or inspection.
- 3. The maintenance contractor should report where they consider that they cannot carry out work safely to the lift owner.** This would include where they need to access or travel with the carrier to access parts requiring maintenance and inspection. The owner should have suitable control measures put in place until remedial work is carried out to address the risks identified.

CONCLUSION

- It is my opinion that all AGOL's designed to either the Supply of Machinery (Safety) Regulations, Machinery Directive, Lift Directive or the harmonised standard EN81-31 should be fitted with means of protection against uncontrolled movement.
- It is my opinion that LOLER requires that protection against free fall be fitted to any lifting installation be fitted.
- It is also my opinion that an operative undertaking maintenance on an AGOL would be protected by PUWER and a risk assessment required by this statutory instrument should identify the risk of free fall and to seek the prevention of such an occurrence