



**Guidelines for the administration of the Department's Responsibilities under the Lift Regulations 1997, Schedule 1: Essential Health and Safety Requirement 2.2. (Hazards to persons outside the lift car: preventing the risk of crushing when the car is one of the extreme positions)**

**April 2003**

**Comments by the Department**

1. The context in which the Department of Trade and Industry in consultation with the Health and Safety Executive comments on the requirements of Essential Health and Safety Requirement (EHSR) 2.2:

It is for the suppliers of products and, in the case of lifts, those persons taking responsibility for their installation to assess how, the relevant legislation applies to their products/installation and to account, as necessary, for their decisions to the market surveillance / enforcement authorities and, in appropriate cases, to the courts. The Department might have a view on the position but this would not have the force of law: the interpretation of legislation is a matter for the courts and, in respect of European Directives, ultimately the European Court of Justice.

**Structure of EHSR 2.2**

2. It is considered by the Department that the first sentence indicates the risk to be addressed and the second sentence specifies the principal manner in which that objective will be met. A derogation (from the requirements of the second sentence) is provided in the third sentence whereby, in exceptional cases where the objective cannot be met in accordance with the second sentence, other methods of meeting the objective might be used provided that prior approval has been obtained from the Department.

**The Requirement contained in the first two of the three sentences in EHSR 2.2**

**The lift must be designed and constructed to prevent the risk of crushing when the car is in one of the extreme positions.**

**The objective will be achieved by means of free space or refuge beyond the extreme positions.**

**3. The Department's interpretation of "free space or refuge beyond the extreme positions".** In the view of the Department:

"The extreme positions" can only mean the highest and lowest positions which the lift car could reach in the event of inadvertent over travel (for whatever reason) and not some working position that can be established, ad hoc, on a temporary basis by means of mechanical or other intervention. Such extreme positions might be established by physical bars, such as buffers or other physical barrier, scotches or some other restriction which would prevent the further movement of the lift car for example, in the case of a hydraulic lift, by the extremity of upper travel which can be achieved by the hydraulic jack which moves the lift car.

The dimensions of the "free space or refuge" must not be reduced because ascending lift cars supported by ropes and chains may continue to travel upwards momentarily, even though the counterweight buffers have been fully compressed or their hydraulic jacks have reached the extremities of their strokes.

4. In the opinion of the Department the **minimum** requirement for the "free space or refuge" can be met by provision of the relevant rectangular block mentioned in applicable harmonised standards e.g. BS EN 81-1:1998 Clause 5.7.1.1 d) in respect of headroom and 5.7.3.3 a) in respect of the pit. It should be made clear that the Department can only consider applications for derogations from the requirement to provide a "refuge" and that all the other linear dimensions indicated in relevant harmonised standards should be respected or else approval sought from a Notified Body that the design of the lift meets the Essential Health and Safety Requirements.

5. If the person taking responsibility for installation of the lift concludes it is impossible to provide the minimum requirement of "free space or refuge" - then the following applies:

**The Requirement (as contained in the third of the three sentences in EHSR 2.2):**

**However, in specific cases, in affording Member States the possibility of giving prior approval, in particular in existing buildings, where this solution is impossible to fulfil, other appropriate means may be provide to avoid this risk**

It should be appreciated that this is a "derogation" from the main provisions of the EHSR and should, accordingly, be construed narrowly.

**The following requirements must be met:**

- The application must address specific cases of lift installation. No blanket approvals will be given.
- **Prior approval** only will be given. Approvals sought subsequent to construction / installation will not be meet the requirement in EHSR 2.2 and will not be issued (see Note E below).

Not only are such approvals meant to be given only in exceptional circumstances whatever the kind of building concerned, they are intended particularly for lifts to be installed in existing buildings. Only in exceptional circumstances will a proposed lift for a new building be eligible for consideration.

- **The solution** based on the free space or refuge beyond the extreme positions must be **impossible to fulfil**. We take “impossible” to mean either physically impossible i.e. due to constraints imposed by factors such as the presence of gas mains or major electric cables or tunnels, or legal constraints such as those imposed by preservation orders or the refusal of owners of adjacent premises to make more space available. It is not an economic concept, so it follows that applications based on differential costs between providing free space or refuge when the lift is in one of the extreme positions and providing another solution cannot be approved. The person seeking the Department’s prior approval must explain to the Department’s satisfaction why his conclusion that the solution, based on free space or refuge at the extreme positions being impossible to fulfil, is a well-founded one.

#### **Other appropriate means to avoid the risk:**

6. Should the Department be satisfied that it is impossible to provide the “free space or refuge” then the installer will be obliged to prevent the risk of crushing by compliance with the appropriate provisions contained in:

- PrEN 81-21 “Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 21: New passenger and goods lifts in existing buildings”.

#### **Notes**

Nothing in EHSR 2.2 should be interpreted as preventing the provision of automatically activated mechanical intervention to create a protected working position in addition to such free space or refuge - as distinct from its provision instead of it.

The Health and Safety Executive is the enforcing authority in most cases for the Lifts Regulations but has no statutory powers to issue an approval. If HSE is approached about an approval under EHSR 2.2, it will refer the enquirer to DTI. In any instance where DTI’s approval is necessary but the person taking responsibility for the installation of the lift has failed to obtain it PRIOR to installation, HSE makes the following request of that person to assist it in deciding what enforcement action to take under the Regulations. The person, should at his own expense, obtain a detailed written statement from a Notified Body explaining why it supports his conclusions that the provision of free space or refuge beyond the extreme positions was impossible and that the other means used to prevent the risk of crushing when the car is in one of its extreme positions are appropriate - if, in fact, the Notified Body does support those conclusions.

Proposals for the Department's consideration under the third sentence of the Lifts Regulations 1997 Schedule 1 EHSR 2.2 should be addressed to:

The Assistant Director of Standards and Technical Regulations (Engineering Directives)  
The Department of Trade and Industry  
Bay 305 Red Zone  
151 Buckingham Palace Road  
London SW1W 9SS

Any enquiries should be made via:

Tel No. 0207 215 0923 or

<mailto:graham.payne@dti.gsi.gov.uk>

**Standards & Technical Regulations Directorate**  
<http://www.dti.gov.uk/strd>

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