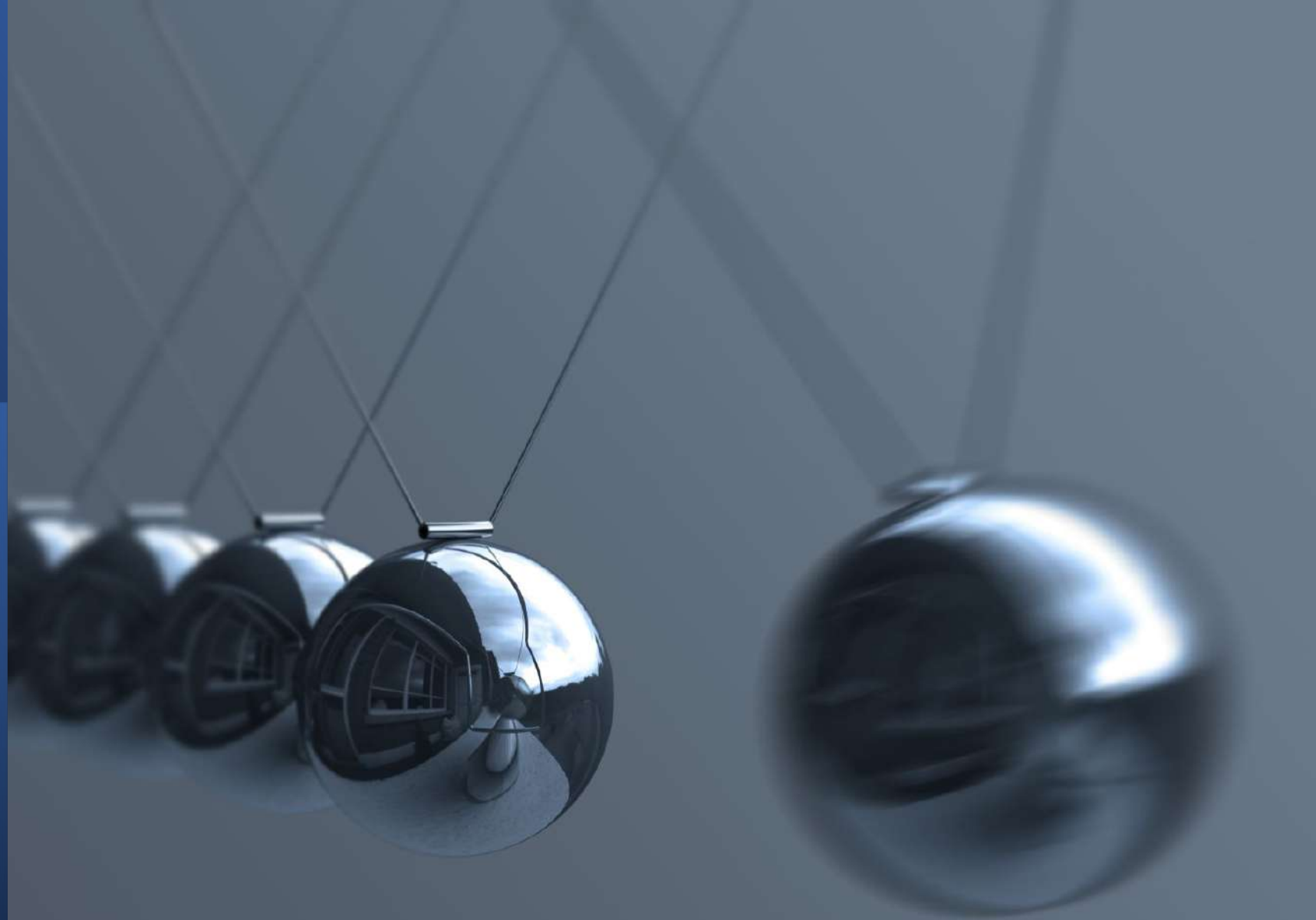


**SBS Lift Forum**  
*23<sup>rd</sup> November 2022*

*Ivan Ferrarini - Farma Ascensori*

# **EC and CEN timeline about «Special tools» and «Instructions»**



# Special tools with EN 81-1 and EN 81-2

## LD 95/16/EC

### ANNEX I - ESSENTIAL HEALTH AND SAFETY REQUIREMENTS RELATING TO THE DESIGN AND CONSTRUCTION OF LIFTS AND SAFETY COMPONENTS

#### 1.1 Application of Directive 89/392/EEC, as amended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC.

Where the relevant hazard exists and is not dealt with in this Annex, the essential health and safety requirements of Annex I to Directive 89/392/EEC apply. The essential requirement of Section 1.1.2 of Annex I to Directive 89/392/EEC must apply in any event

#### 4.4. Lifts must be equipped with means enabling people trapped in the car to be released and evacuated

## Guide to the application of LD 95/16/EC

### § 96 The principles of safety integration

Paragraph (f) of section 1.1.2 implies that, when special equipment, such as special tools or software, is necessary for safe and effective execution of maintenance or rescue operations, such equipment should be supplied with the lift by the installer when the lift is placed on the market

### § 125 Release and evacuation of trapped persons

If special equipment is needed to release and evacuate trapped people, it must be supplied with the lift by the installer when the lift is placed on the market so that it can be kept permanently available on site. However, in certain extreme cases (for example, the failure of the suspension or support system), it may be necessary for the rescue service to use special equipment that is not supplied with the lift installation and that cannot be kept on site.

# Special tools with EN 81-1 and EN 81-2

EN 81-1/2:1998

Nothing



European Office of Crafts, Trades and Small and Medium-sized Enterprises for Standardisation  
Bureau Européen de l'Artisanat et des Petites et Moyennes Entreprises pour la Normalisation  
Europäisches Büro des Handwerks und der Klein- und Mittelbetriebe für die Normung

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CEN/TC 10/WG 1 N 891

Brussels 20th May 2009  
Prot n° 190/09/ST

### 3. Conclusions

The Commission will request CEN to include in the relevant European standards appropriate specifications to deal with the essential health and safety requirements of the Lifts Directive relating to the special tools and software.

EN 81-1/2:19

Nothing



ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL  
New Approach Industries, Tourism and CSR  
Mechanical, Electrical and Telecom Equipment

CEN/TC 10/WG 1 N 785

Directive 95/16/EC  
Lifts Working Group  
Doc.LWG.2008.01



# Special tools with EN 81-20

## EN 81-20:2014 & 2020

### 3.57 Special tool

tool unique to the equipment required in order to keep the equipment in a safe operating condition or for rescue operations

**5.3.9.3.2** Where the emergency unlocking key is of a length greater than 0,20 m it is regarded as a special tool and shall be available at the installation site.

**5.3.15.3** It shall be possible, at least at a distance defined in 5.6.7.5, once the door has been opened, to open the car door by means of a key longer than the emergency unlocking key on site. This also applies to car doors. **5.3.9.2.**

### 5.11.2.6 Programmable electronic systems in safety related applications (PESSRAL)

It shall be possible to identify the failure state of the PESSRAL, either by a built-in system or by an external tool. If this external tool is a special tool, it shall be available on the site.

### 3. Conclusions

The Commission will request CEN to include in the relevant European standards appropriate specifications to deal with the essential health and safety requirements of the Lifts Directive relating to the special tools and software.

Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2014/33/EU

Essential Requirements of Directive	Clause(s)/subclause(s) of this EN	Remarks/Notes
1.1	See below Table ZA.2	
4.4	5.2.2.3, 5.2.3, 5.2.6.2, 5.2.6.6, 5.3.6.3, <u>5.3.9.3</u> , <u>5.3.15</u> , 5.4.5, 5.4.6, 5.9.2.3, 5.9.3.9, 5.12.1.6	Evacuation of trapped persons
	5.2.5.4, 5.2.6.1, <u>5.3.9.3.2</u> , 5.4.7, 5.4.8, 5.6.2.1.6.3, 5.9, <u>5.11.2.6</u> , 7.2.2, 7.2.3	Principals of safety integration, Ventilation, Lighting, Entrapment in the well, Handling of equipment, Protection below the well, Environmental influences, working on car roof, lift machinery, special equipment and accessories

Table ZA.2 — Correspondence between this European Standard and Annex I of Directive 2014/33/EU Annex I, 1.1

Essential Requirements of Directive	Clause(s)/subclause(s) of this EN	Remarks/Notes

# Ladders vs. special tools

## Guide to application of Machinery Directive 2006/42/CE

### §172 Reasonably foreseeable misuse

The first step of the risk assessment process described in General Principle 1 also requires the manufacturer to take account of reasonably foreseeable misuse of machinery. The machinery manufacturer cannot be expected to take account of all possible misuse of the machinery. However, certain kinds of misuse, whether intentional or unintentional, are predictable on the basis of experience of past use of the same type of machinery or of similar machinery, accident investigations and knowledge about human behaviour.

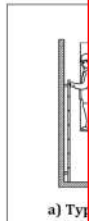
### §174 The 3-step method

Providing warnings and instructions for use is considered as an integral part of the design and construction of the machinery. However, the fact that this third step is the last in the order of priority given in section 1.1.2 (b) means that warnings and instructions must not be a substitute for inherently safe design measures and technical protective measures when these are possible, taking into account the state of the art.

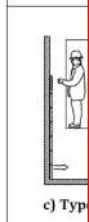
## Ladders

Annex F  
(normative)

Pit access ladder



a) Typ



c) Typ

Annex I of Directive  
2006/42/CE Annex I, 1.1

es

# Instructions with EN 81-1 and EN 81-2

## LD 95/16/EC

### ANNEX I - ESSENTIAL HEALTH AND SAFETY REQUIREMENTS RELATING TO THE DESIGN AND CONSTRUCTION OF LIFTS AND SAFETY COMPONENTS

6.2 . Each lift must be accompanied by documentation drawn up in the official language(s) of the Community, which may be determined in accordance with the Treaty by the Member State in which the lift is installed . The documentation shall contain at least :

- **an instruction manual containing the plans and diagrams necessary for normal use and relating to maintenance, inspection, repair, periodic checks and the rescue operations referred to in Section 4.4 ,**
- a logbook in which repairs and, where appropriate, periodic checks can be noted.

## Guide to the application of LD 95/16/EC

### § 135 Instruction manual and logbook for lifts

The lift installers' instructions must provide the information necessary to alert the owner of the lift about the need for adequate maintenance. In particular, **they must include information relating to the foreseeable lifetime of critical components and criteria for their inspection and replacement.**

The lift installer's instructions must provide the information on the use of any special equipment, **such as special tools or software, necessary for the safe and effective maintenance of the lift or for rescue operations.**

# Instructions with EN 81-1 and EN 81-2

## EN 81-1/2:1998

### 16.3 Installer information

The manufacturer/installer shall provide an instruction manual

16.3.1 Normal use

16.3.2 Maintenance

## EN 13015:2001+A1:2008

### • Maintenance for lifts and escalators - Rules for maintenance instructions

4 Elaboration of maintenance instructions

4.1 General

4.2 Elements to be taken into account for the maintenance instructions

4.3 Information to be included in the maintenance instruction

5 Risk assessment

6 Information to the owner for lift rescue operations

7 Markings, signs, pictograms and written warnings

8 Format of the maintenance instruction handbook

## EN 81-1/2:1998+A3:2009

### 16.3 Installer information

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16.3.1 Normal use

16.3.2 Maintenance



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CEN/TC 10/WG 1 N 891

**CEN/TC 10/WG 1 N 785**



EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

New Approach Industries, Tourism and CSR  
Mechanical, Electrical and Telecom Equipment

Directive 95/16/EC  
Lifts Working Group  
Doc.LWG.2008.01



# Instruction with EN 81-20

## EN 81-20:2014

### 7 Information for use

#### 7.2.2 Normal use

The instruction manual shall give the necessary information about the normal use of the lift and rescue operation as described in EN13015:2001+A1:2008 and in

g) **location and use of special tools**

i) rescue operation: in particular, release of the brake, ascension, unintended car movement protection, safety gear, **including the identification**

#### 7.2.3 Maintenance

The instruction manual shall be in accordance with EN13015:2001+A1:2008.

It shall **inform about the identification and use of the special tools**.

According to section 6.2 of Annex I of the Lifts Directive, special documentation must be supplied by the installer of the lift to the owner of the lift when the lift is placed on the market and before the lift is put into service. The lift installer's instructions must provide the information on the use of any special equipment, such as special tools or software, necessary for the safe and effective maintenance of the lift or for rescue.

Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2014/33/EU

Essential Requirements of Directive	Clause(s)/subclause(s) of this EN	Remarks/Notes
1.1	See below Table ZA.2	
6.2	7.1, 7.2, 7.3	User manual
	5.2.5.4, 5.2.6.1, 5.3.9.3.2, 5.4.7, 5.4.8, 5.6.2.1.6.3, 5.9, 5.11.2.6, <u>7.2.2, 7.2.3</u>	Principals of safety integration, Ventilation, Lighting, Entrapment in the well, Handling of equipment, Protection below the well, Environmental influences, working on car roof, lift machinery, special equipment and accessories
1.6.1	5.12.1.7, 5.12.1.8, <u>7.2.2, 7.2.3</u>	Machinery maintenance



# Instructions with EN 81-20



M/549

Brussels, 21.9.2016  
C(2016) 5884 final

**COMMISSION IMPLEMENTING DECISION**

of 21.9.2016

on a standardisation request to the European Committee for Standardisation as regards lifts and safety components for lifts in support of Directive 2014/33/EU of the European Parliament and of the Council

EN 13015:2001+A1:2008

**Maintenance for lifts and escalators - Rules for maintenance instructions**

4 Elaboration of maintenance instructions

4.1 General

4.2 Elements to be taken into account for the maintenance instructions

4.3 Information to be included in the maintenance instruction

5 Risk assessment

6 Information to the owner for lift rescue operations

7 Markings, signs, pictograms and written warnings

8 Format of the maintenance instruction handbook

# Outcome period 1999 - 2022

EC

- LD EHSR
- MD EHSR
- Information note (2008)
- M/549 COMMISSION IMPLEMENTING DECISION

EN 81-20

- Special tools shall be on site
- Instruction manual according to EN 13015

EN 13015

- **CANCELLED**

Maintenance instruction shall include:

- a) The **maintenance instruction of the components and equipment of the lift that during its life cycle are affected by wear** (see 0.4.3) or that the use can reduce the level of safety of the lift.

In particular maintenance instruction shall include:

- i) Operation to verify that **the clearance between door panels, or between panels and uprights, lintels or sills, is included into the tolerance** (see 5.3.1.4)
- ii) Operation to verify that **the horizontal distance between the sill of the car and sill of the landing doors is included into the tolerance** (see 5.3.4.1)

Etc....

- a) The check to **verify that the conditions of the environment in which the lift is installed are the same than after the completion of the installation;**

In particular shall be visually checked:

- i) Passageways, corridors, etc. are not obstructed by the open door/trap of the lift and/or any protection means for working areas outside the well (see 0.4.18)
- ii) The lighting in the well give the required intensity of illumination (see 5.2.1.4.1)
- iii) The car roof is clean and non slipping (for example cause the oil of the guide) (see 5.4.7.1 b))

Etc...

➤ Spe

cor

➤ Spe

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# Thank you

## Thank you for the attention

Any question?  
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