vimec

E10 EcoVimec TECHNICAL CATALOGUE The technical catalogue is mainly intended for our partners (sales agents, dealers, importers ...) all around the world. The aim is to provide a complete guide to all that Vimec E10 EcoVimec offers in terms of product specifications, options, versions.

Given the continuous product updates, this document will be periodically updated and made available through the usual channels.

VERSION 1.0 Released on 01/01/2021



OVERVIEW

	E10 EcoVimec	
Traction system	MRL, belt drive	
Motor	Electrically engaged, 1.5 kW/3kW (HL-LT-HS) - 230V 50Hz	
Rated Speed (max)	0.15 m/s - 0.26 m/s (HS)	
Load capacity (max)	400 kg - 500 kg (HL)	
Maximum travel	14.6 m	
N° stops (max)	5	
N° accesses (max)	6	
N° doors/floor (max)	2	
Headroom (min)	2,450 mm - 2,600 mm (with cabin doors)	
Pit (min)	120 mm (masonry shaft) - 140 mm (metal structure)	
Cab height (std)	2,000 mm	
Door height (std)	2,000 mm	
Arrival at the floor and soft stop with the «soft start/stop» system		
Electrical safety locks		
Compliant with European Directive 2014/30 Electromagnetic Compatibility, European Directive 42/2006 «Machinery Directive»		

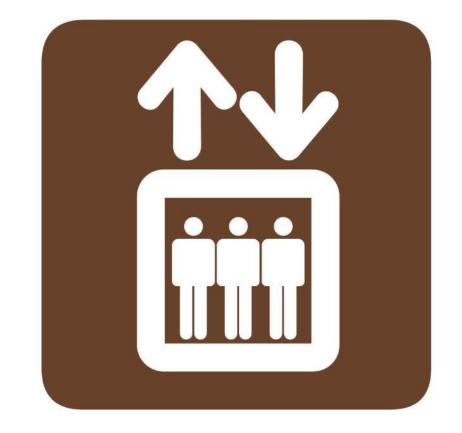




LOAD CAPACITY

Load capacity (kg) with different cabin types and versions

Cabin type	E10 Standard	E10 HL/LT
Standard cabin*	400	500
Standard cabin with glass wall or glass insert	400	500
Cabin with 1 telescopic door	300	400
Cabin with 1 telescopic door and 1 glass wall or with glass insert	300	400
Cabin with 1 telescopic door and 2 glass walls or with glass inserts	300	400
Cabin with 1 telescopic doors	300	400
Cabin with 2 telescopic doors and 1 glass wall or with glass insert	300	400
Cabin with 1 telescopic glass door	-	350

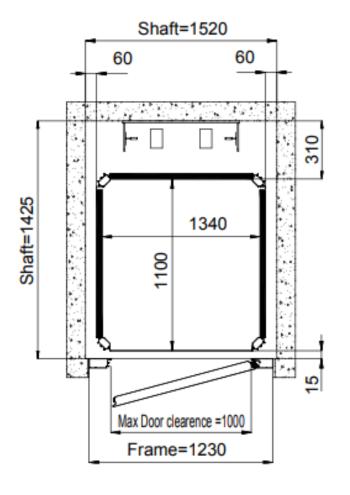




^{* 3} walls, Color series, Steel or Stainless Steel, WITHOUT DOOR

PLATFORM DIMENSIONS

NOMINAL WIDTH (L)	NOMINAL DEPTH (P)
900	900
900	1250
1000	1250
1000	1400
1100	1400
1250	900
1250	1000
1250	1250
1300	1030
1400	1000
1400	1100
1460	1170





CE CERTIFICATE





VERSIONS

As alternative to the standard version, E10 is available in 3 special versions to meet every need:

HL - Heavy Load	HS - High Speed EXTRA-EU ONLY
Max Load capacity 500 kg -	400 kg with cabin door
3 kW Mc	otor
Reinforced st	tructure
Available only with the following platforms: ➤ 1300 x 1030 ➤ 1460 x 1170	
Telescopic glass doors as option	
Max Rated Speed 0.26 m/s	
OPTIONAL Counterweight with 2.2 kW motor*	STANDARD Counterweight

^{*} Particularly recommended for elevators with more than 4 stops intended to be used by more people and with more frequency (e.g. small residential building). It is also recommended for machines with 2/3 stops in case of heavy traffic.

VERSIONS

The **Low Temperature (LT)** version is available for markets with particularly cold climate. The differences with the standard equipment of E10 are:

- Increased 3 kW motor (as for HL/HS versions) integrated with a dedicated heater.
- **Heated** landing door **locks** and closing / opening mechanisms (including any motorizations) a special rubber thermal mat is applied.
- **Heated threshold** for telescopic doors the heated thresholds include a set of temperature regulating cables with constant power that guarantee their operation down to a minimum temperature of -50°C.
- Traction belts made of thermoplastic polyurethane with a working temperature of -30°/+80°.
- Available only with 1460 x 1170 platform.
- Available only for outdoor installations with bolted platform metal structure.



LEGEND

Browsing through the catalogue, you will encounter some icons and colors that highlight the key sales topic and the Unique Selling Points (USP) of E10:



SALES MEMO The few slides, before each chapter, have the aim of summarize the most important topics to be reminded during a negotiation and relevant for the customer. The slides feature links to other slides containing more details about each topic. To go back to the SALES MEMO slide, just click on By clicking on you will be redirected to the detailed slide.



USP ASSEMBLY AND MAINTENANCE Icon and color identify the «plus» related to assembly and maintenance



USP ECOSUSTAINABILITY Icon and color identify the «green» characteristics of E10, mainly about the materials



USP SAFETY Icon and color identify the «plus» related to the E10 safety devices and systems

In the following slides, you will find all the USP points in lists - every point can be clicked and is linked to a detailed slide. By clicking on the icon, you are redirected to the USP list.



OVERVIEW - SALES MEMO

- <u>INTERIORS Standard equipment vs options</u>
- INTERIORS E10 with one access in the cabin
- INTERIORS E10 with two access in the cabin
- DOORS AND ACCESSES N° accesses rules
- DOORS AND ACCESSES Load capacity/ number of doors
- DOORS AND ACCESSES Standard for swing doors
- DOORS AND ACCESSES Standard for automatic doors
- TRACTION Motor advantages
- FINISHES Summary



OVERVIEW - USP ASSEMBLY AND MAINTENANCE

(S)

- KIT GSM recommended when the phone line socket is not available close to the elevator.
- Rules for **HANDLE** installation in the cabin according to platform dimension.
- Not necessary to make any holes for installation of <u>FLOORING KIT AT CUSTOMER'S CHOICE</u>.
- Optional <u>SHAFT LIGHTING</u>.
- THRESHOLDS rules.
- Pit floor must be able to bear a **LOAD** at least 5000 N/m2.
- ONLY ONE BOX NECESSARY for machines up to 4 floors/doors.
- Components in the box are in assembly order (<u>Last In First Out</u>).
- Wooden box can be closed at the end of the day and act as <u>WAREHOUSE</u> on site.
- Wires and components are supplied as <u>PRE-ASSEMBLED KITS</u>.

OVERVIEW - USP ECO-SUSTAINABILITY

- FLOORING material 100% recyclable and recycled (PVC)
- LOW ENERGY CONSUMPTION
- PLASTIC-FREE packaging materials, recycled and recyclable.





OVERVIEW - UPS SAFETY



- EMERGENCY LIGHT
- VOCAL SYNTHESIZER as option
- <u>TELEPHONE ON BOARD</u> as standard
- **EMERGENCY STOP BUTTON** in cabin
- DOORS and GLASSES can bear a mechanical force of 300 N
- <u>FLOOR</u> and <u>CABIN</u> door locking system
- Full-height <u>INFRARED BARRIER</u>
- ANTI-SHEARING protections
- Safety <u>REDUNDANCIES</u>
- Safety redundancies in the <u>PIT</u> and in the <u>HEADROOM</u>
- BACKUP INVERTER
- OVER SPEED GOVERNOR and SAFETY GEAR
- <u>TELEMONITORING</u>



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7. <u>APPENDIX</u>





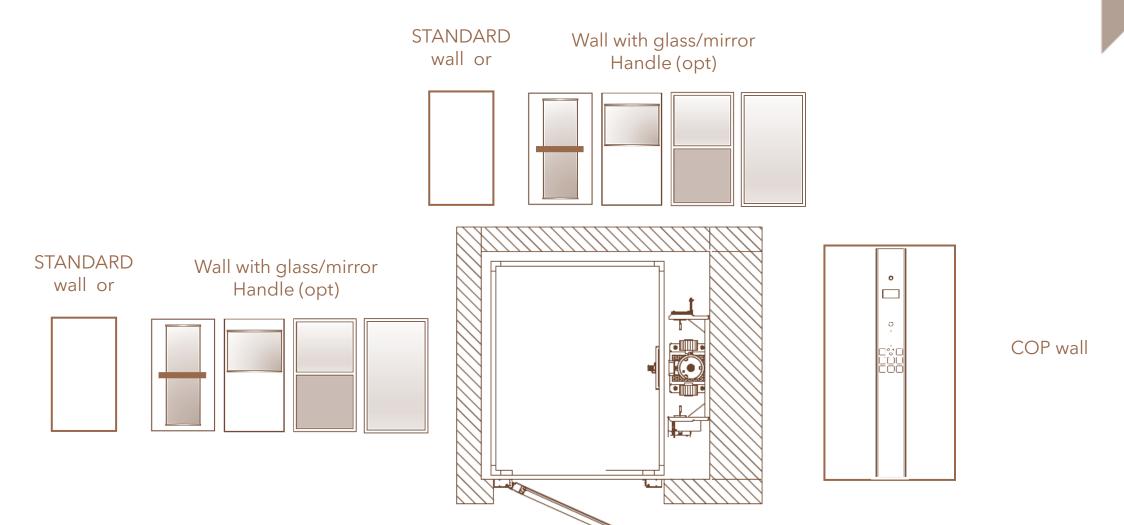
CABIN INTERIORS- SALES MEMO

Standard equipment	Options	
Color series walls available in the following finishes: grey, beige, blue, maple and cherry	Alternative finishes for walls	
Safestep floor, grey colour with stamps	4 alternative finishes for platform	
Full-height cabin push-button panel		
Floor push-button with 50x50 buttons and braille		
On-board telephone	Auto-dialer 🛅	
I-button ready	I-button activation with keys	
Ceiling with LED bar lighting	«Starry night» ceiling	
Emergency stop button		
	Cabin and floor display	
	Wall with horizontal or vertical mirror	
	Glass wall or half-wall	
	Aluminum handle	vimec

WALLS - SALES MEMO

E10 with ONE ACCESS IN THE CABIN - Possible walls combinations

Same combination are possible also with telescopic door.





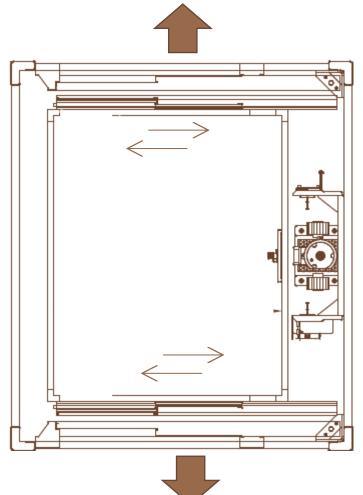
WALLS - SALES MEMO

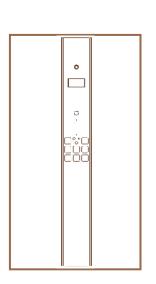
E10 with 2 ACCESSES IN THE CABIN - Possible walls combinations

Same combination are possible also with panel doors.

Valid also for 2 adjacent accesses.





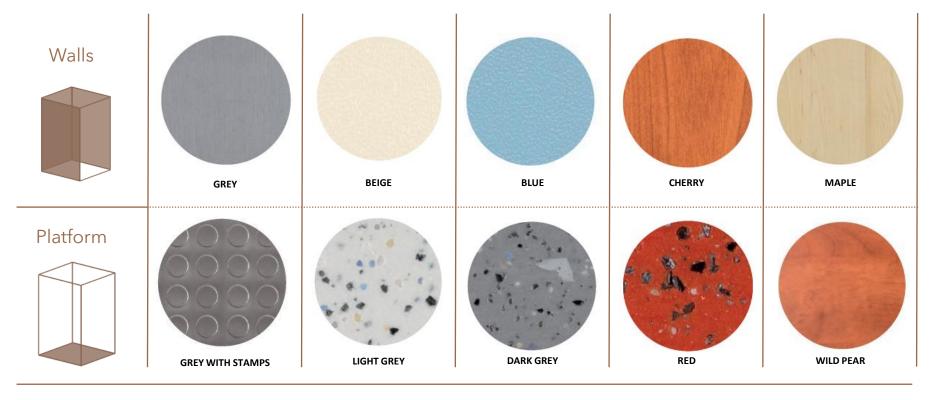


COP wall



CABIN FINISHES - OVERVIEW











WHITE



SMOKE GREY GLASS



POLISHED LINEN STAINLESS STEEL



BRUSHED STAINLESS STEEL





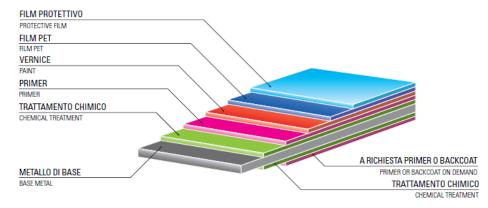


All walls and ceiling are made of **coated steel Colour type** available in standard grey (as shown in the photo), beige, blue, cherry, maple and matt white.

In detail, the walls are made of steel sheets pre-coated with a layer of paint and overlaid with a coloured PET film available in the finishes listed above.

DIMENSIONS

Thickness mm da 0.30 a 2 PET coating thickness 30-55 μ (organic coating)



As option, the following finishes are available:



POLISHED LINEN STAINLESS STEEL

So called because it resembles the weave of linen yarns, it is an antiscratch, anti-vandal, high durability and low reflectivity finish.



BRUSHED STAINLESS STEEL



TRANSPARENT OR SMOKE GREY GLASS

Not available for COP wall (it will be made in a finish at customer's choice)

It is also possible to choose walls with different finishes combined inside the same cabin (i.e., stainless steel COP wall with *Colour* type walls).





WALLS - TECHNICAL FEATURES (COLOUR TYPE WALLS)



MAIN CHARACTERISTICS

	Test norm	Test results
Maximum temperature range for end use	-20 °C + 80 °C	No remarkable variations
Adhesion after drawing 6 mm	UNI EN <u>13523-6</u>	Good
Adhesion after cupping	UNI EN <u>13523-7</u>	>/= 1 T
Pencil hardness	UNI EN <u>13523-4</u>	H-2H
Resistance to cracking on bending (T-bend		
test)	UNI EN <u>13523-7</u>	2 T free of cracks
Surface scratch resistance	UNI EN <u>13523-16</u>	Weight loss 25-28 mmg
		16 J no visible cracks using a magnifying
Resistance to rapid deformation (impact test)	UNI EN <u>13523-5</u>	lens 10x
Resistance to water	UNI EN <u>13523-9</u>	No loss of adhesion or blisters
Corrosion resistance	UNI EN <u>13523-8</u>	360 h creepage max 2 mm no blisters
Resistance at 100% relative humidity	UNI EN <u>13523-26</u>	750 h no blisters
Resistance to solvents	24 h contact	No stain build-up
Reaction to fire classification for building		
products	EN 13501	Classification A1



WALLS - TYPES



CABIN INTERIORS

BLUE



CHERRY



MAPLE



BRUSHED STAINLESS STEEL



ON-BOARD PUSH-BUTTON



The full-height on-board push-button panel is available in **grey Similinox** as standard with dimensions 2000 x 230mm.

The push-button is positioned at the centre of the wall and sticks out only 20 mm from the wall.

In case of stainless-steel walls, the COP is made of the same material (polished lined or brushed).

On-board push-button includes as standard:

- Squared buttons for floor selection, door opening and emergency
- Emergency stop button
- I-Button
- Machine activation key
- Load sensor

Standard equipment includes a telephone positioned on the right or left-hand side of the COP.

The LCD display, handle and auto-dialer are available as option.

In the next slides, we will go into detail of every single component of the push-button panel.



ON-BOARD PUSH-BUTTON



The mechanical buttons are **square-shaped 56x56** (active part 50x50) backlit in blue and yellow for the emergency button.

The buttons are made of transparent polycarbonate and are vandal-proof.

The numbers and pictograms are made by applying a special label including braille.

The buttons are positioned at 19 mm from each other.

Embossed

The car control panel is fully compliant with <u>EN 81-41:2011</u>, in particular:

Element	Requirements	E10 Eco Vimec	
Minimum dimension of the	Inscribed circle with a	1	
active part of the buttons	diameter of 20 mm	√	
Identification of active part of	Identifiable visually and by		
Identification of active part of buttons	touch from face plate or	√	
buttons	surrounds		
Identification of focus late	Colour to contrast with its	Backlit polycarbonate	
Identification of faceplate	surrounds	frame	
Operating force	2.5 - 5.0 N	1	
Mechanical operating	Required to inform user	Backlight + audio	
feedback	that the pushed button has	_	
leedback	been operated	signal	
Position of symbol	Preferable on active part	1	
Position of symbol	(or 10-15 mm left of it)	√	
Size of symbol (relief)	15 - 40 mm	15 mm symbol only,	
Size of symbol (relief)	13 - 40 111111	30 mm with braille	
Distance between active	10 mm	19 mm	
parts of call buttons	10111111	19 111111	
Minimum height between		950 mm from lower	
the floor level and the centre	900 mm	button	
line of any button		button	
Maximum height between	1,200 mm (preferably		
the platform floor level and	1,100 mm)	4400	
the centre line of the highest	','''	1100 mm	
button on platform			

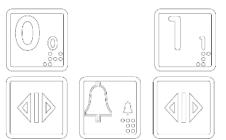
ON-BOARD PUSH-BUTTON



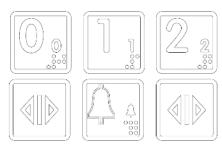


According to the number of stops, the push-button panel is configured as follows:

In case of 2 stops (total 5 buttons, all backlit)



• In case of 3 stops (total 6 buttons, all backlit)



 In case of 4 or 5 stops (total 8 buttons) - in case of 4 stops, the top right button is **NOT** backlit)



The "bell" and opening-door buttons are always backlit.



CABIN DISPLAY





As option, it is possible to install an **LCD display** with floor and arrow indicator.



MAIN CHARACTERISTICS

- Screen: transparent polycarbonate shock-proof and scratch-proof.
- Colours: white light on blue background
- Chromed frame
- Power supply: 12/24Vdc +/- 10%.
- Available characters: programmable characters set in Latin, Cyrillic and Greek alphabetic.



By selecting the **voice synthesis** option, it is possible to add a floor arrival sound (commonly called "gong") and/or a floor arrival voice announcement that can be configured at the time of installation - in this case an audio file is played in the selected language (available languages: Italian, English, French, German). It is also possible to set the volume by choosing 3 modes: minimum, medium, maximum.





TELEPHONE







A telephone with handset and keypad is included as standard. It can be used like any other telephone and is also usable in the event of a black-out as it is powered by the telephone line. The telephone connection in the cabin is standard type, so it is also possible to install any telephone handset of the customer's choice. The telephone can be installed EXCLUSIVELY on the push-button panel.

As an alternative or in addition to the telephone, it is possible to install an <u>auto-dialer</u> (available as option).

The presence of the telephone in the cabin is standardised by EN 81-41:2011, par. 5.5.16.1 «passengers shall have available in the platform an easily recognisable and accessible device for this purpose. This device shall allow a two-way voice communication by a permanent contact with a rescue service».





Dichiarazione di conformità UE EU Declaration of Conformity (DoC)

Noi / We:

Nome del fabbricante / Company name: Indirizzo postale / Postal address:

CAP e Città / Postcode and City:

Telefono / Telephone:

Indirizzo Posta elettronica / E-Mail address:

Dichiariamo che la presente DoC è rilasciata sotto la nostra sola responsabilità, e appartiene al seguente prodotto Declare that the DoC is issued under our sole responsibility and belongs to the following product:

Apparecchio modello / Apparatus model:

Tipo prodotto / Product Type:

Lotto n. / Batch no.:

Numero serie / Serial number:

Telefono

Oggetto della dichiarazione / Object of the declaration:



L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione /
The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
Direttive 2014/30/UE e 2014/35/UE / Directives 2014/30/EU and 2014/35/EU

Riferimento alle pertinenti norme armonizzate utilizzate /

The following harmonised standards and technical specifications have been applied:

Titolo / Title :

EN 61000-6-1

EN 55022

EN 41003

EN 60950

Data di pubblicazione / Date of standard/specification

2007

2014

Organismo notificato (se applicabile) / Notified body (where applicable):

Informazioni supplementari / Additional information:

Firmato a nome e per conto di / Signed for and on behalf of:

26/06/2018
(Luogo e data del rilascio / Place and date of issue)

Il Legale Rappresentante

(Nome, funzione, firma /Name, function, signature)

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AUTO-DIALER





By pressing the bell button, an acoustic alarm is activated and remains active until the button release. If an **auto-dialer** is present, available as an option, when the acoustic alarm is activated and the button is pressed for about 8 seconds, it makes a series of calls to the numbers previously set by our technician at the time of installation, in the pre-set order of priority. The dialer is able to make one call at a time and works even in the event of a black-out (no main voltage) for a maximum time of 2 hours. The operation mechanism of the dialer is quite simple: the call can be forwarded either via the house telephone line, or via the GSM line through a dedicated SIM card (see dedicated slide "KIT GSM").







AUTO-DIALER



The auto-dialer is installed in the elevator shaft and is always provided as **standard** equipment.

MAIN CHARACTERISTICS

- Management of 24 programmable phone numbers to be freely associated with different alarm sources and called parties
- Technological alarms: low battery / replace battery / no external power supply / built-in speaker unit diagnostic / auxiliary alarm
- Compliant with: <u>EN 81-80</u>, <u>EN 81-28</u>, <u>EN 81-70</u>
- Low battery signaling via device status LED
- Programmable handsfree connection mode
- Telephone line presence check
- Pre-recorded languages: 8 (Italian / English / German / French / Polish / Portuguese / Russian / Spanish)
- Pre-recorded voice messages: 30 minutes, restorable
- Courtesy message for the car: multi-language, customizable (max. 25 s)







Peso: 234 g







AUTO-DIALER - GSM KIT



The GSM kit includes a device which, connected directly to the auto-dialer's telephone line connection, allows calls to be made and received via the GSM network.

It requires a GSM SIM card not provided by Vimec.



It is recommended when the phone line socket is not available close to the elevator.

MAIN CHARACTERISTICS

- GSM/GPRS module: QUAD-BAND
- Transmission power: 1 W at 1800/1900 MHz, 2 W at 850/900 MHz
- GSM signal indicator LED: green
- GSM signal indicator flash: 1, 2, 3 or 4 for low, medium, good, high signal level
- Status indicator LED: red
- Line status indicator LED (FXS output: clear, engaged, ring): white
- Power supply status indicator LED: blue
- SIM card slot: 2FF, built-in
- Telephone line connection: terminal block or connector RJ-11
- Antenna connector: SMA/f
- Antenna: magnetic base antenna with cable (2 m) and SMA/m connector
- External adapter: 230 Vac 50 Hz / 12 Vdc 500 mA, optional



You can find it in the price list as: Kit GSM for communication device on board (telephone or auto-dialer) with wireless compliance



AUTO-DIALER - INDUCTION LOOP



The **induction loop** is a hearing aid specifically conceived to enable two-way communication for hearing-impaired elevator passengers. Thanks to the induction loop, in the event of an emergency call, a hearing-aid wearer is able to listen clearly to the voice prompts broadcasted by the emergency phone and can communicate perfectly with the service centre operator without any background noise or interferences.

The induction loop is linked to the auto-dialer and it is available as **option**. Equipped with backlit pictogram and microphone, it provides an excellent audio

quality.



MAIN CHARACTERISTICS

- Amplifier unit dimensions (terminal blocks not included): 117 x 63 x 24 mm
- Weight: 87 g
- Loop wire circumference: 3000 mm
- Loop wire connection cable: 3440 mm
- Power supply: 12 Vdc
- Built-in microphone





Dichiarazione di conformità UE EU Declaration of Conformity (DoC)

Noi / We:

Nome del fabbricante / Company name:

Indirizzo postale / Postal address:

CAP e Città / Postcode and City:

Telefono / Telephone:

Indirizzo Posta elettronica / E-Mail address:

Dichiariamo che la presente DoC è rilasciata sotto la nostra sola responsabilità, e appartiene al seguente prodotto: Declare that the DoC is issued under our sole responsibility and belongs to the following product:

Apparecchio modello / Apparatus model:

Tipo prodotto / Product Type:

Lotto n. / Batch no.:

Numero serie / Serial number:

EMERGENCY PHONE

Oggetto della dichiarazione / Object of the declaration:



L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione / The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Direttiva 2014/33/UE / Directive 2014/33/EU - Direttiva 2014/53/UE / Directive 2014/53/EU

Riferimento alle pertinenti norme armonizzate utilizzate /

The following harmonised standards and technical specifications have been applied:

Titolo / Title:

EN 81-28 EN 12015

EN 12016

Data di pubblicazione / Date of standard/specification

2018 + AC:2019

2016 + AC.20 2014

2014

Informazioni supplementari / Additional information:

Firmato a nome e per conto di / Signed for and on behalf of:

(Luogo e data del rilascio / Place and date of issue)

Recanati, 24/02/2020

Il Legale Rappresentante Massimo Baldoni

(Nome, funzione, firma /Name, function, signature)

te Asplul

Dichiarazione di conformità UE EU Declaration of Conformity (DoC)

Noi / We:

Nome del fabbricante / Company name:

Indirizzo postale / Postal address:

CAP e Città / Postcode and City:

Telefono / Telephone:

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Tipo prodotto / Product Type:

Lotto n. / Batch no.:

Numero serie / Serial number:

GSM500

Gateway GSM

Oggetto della dichiarazione / Object of the declaration:



L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione / The object of the declaration described above is in conformity with the relevant Union harmonisation legislation: Direttiva 2014/53/UE / Directive 2014/53/EU

Riferimento alle pertinenti norme armonizzate utilizzate /

The following harmonised standards and technical specifications have been applied:

Titolo / Title:

EN 301 511

EN 301 489-1

EN 301 489-52

Data di pubblicazione / Date of standard/specification V9.0.2 (2003) par.4.2.16; 4.2.17

v.2.1.1 v.1.1.0

EN 12015 2014 EN 12016 2013

EN 60950-1 2006; A11:2009; A1:2010; A12:2011; A2:2013

Organismo notificato (se applicabile) / Notified body (where applicable):

Informazioni supplementari / Additional information:

Firmato a nome e per conto di / Signed for and on behalf of:

(Luogo e data del rilascio / Place and date of issue)

Recanati, 22/09/2017

II Legale Rappresentante Massimo Baldoni

(Nome, funzione,firma /Name, function, signature)



EMERGENCY STOP BUTTON

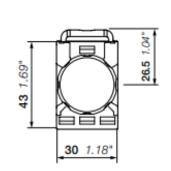


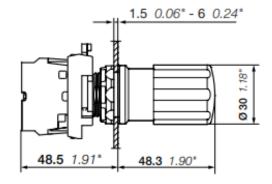
The red **emergency stop button** is always installed at 1083 mm from the ground in compliance with EN 81-41:2011, par. 5.5.15.5: «An emergency stopping device in accordance with EN ISO 13850 shall be fitted on the platform that, when operated, shall directly interrupt the electric safety chain. This device shall be clearly

• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •			
Vicible and	accaccible t	to the licer	easy to operate».	
VISIDIE aliu d	accessioner	O HE USEL	easy to oberate».	

MAIN CHARACTERISTICS	
Colour	Red
Width	30 mm
Height	30 mm
Protrusion from COP	48.3 mm
Net weight	0.036 kg
Operating temperature	-25°/+70°C
Protection class	<u>IP66</u>
Function	Rotation locking/unlocking

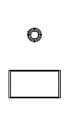


















EMERGENCY STOP BUTTON

EU Declaration of Conformity

EU Konformitätserklärung Déclaration UE de conformité Dichiarazione di conformità UE

This declaration of conformity is issued under the sole responsibility of the manufacturer

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller / La présente déclaration de conformité est établie sous la seule responsabilité du fabricant / La presente dichiarazione di conformità è rilasciate sotto la responsabilité esclusiva del fabbricante

Object of declaration

Gegenstand der Erklärung / Objet de la déclaration / Oggetto della dichiarazione

Emergency stop / Not-Aus / Arrêt d'urgence / Pulsanti di arresto di emergenza Type / Typ / Type / Tipo MEPY, MPE, MPM, MEM

The object of this declaration is in conformity with the relevant Community harmonisation legislation Der oben beschriebene Gegenstand der Erklärung erfüllt die einschlägigen / Harmonisierungsrechtsvorschriften der Gemeinschaft /

L'objet de la déclaration décrit ci-dessus est conforme à la législation communautaire d'harmonisation applicable / L'objet de la déclaration décrit ci-dessus est conforme à la législation communautaire d'harmonisation applicable / L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa comunitaria di armonizzazione

Low Voltage Directive / Niederspannungsrichtlinie / Directive basse tension / Direttiva Bassa Tensione No. 2014/35/EU

EMC Directive / EMV-Richtlinie / Directive CEM / Direttiva EMC No. 2014/30/EU

Machinery directive / Maschinenrichtlinie / Directive sur les machines / Direttiva machine No. 2006/42/EC

RoHS Directive / RoHS Richtlinie / Directive RoHS / Direttiva RoHS No. 2011/65/EU incl. 2015/863/EU

and are in conformity with the following harmonized standards or other normative documents nachgewiesen durch die Einhaltung der nachstehend aufgeführten Normen oder anderen normativen Dokumenten /

nacrigewesen durch die Einnartung der nachstehend aurgeführten Normen oder anderen normativen Dokumenten / et justifié par le respect des Normes mentionnées ci-dessous ou autres documents normatifis / e sono stati applicati le norme o altri documenti normativi indicati di seguito

EN60947-1:2007/A1:2011/A2:2014 EN60947-5-1:2004/A1:2009 EN60947-5-5:1997/A1:2005/A11:2013 EN ISO13850:2008 EN 50581:2012

.2042

Year of CE-marking: 2002

Jahr der CE-Kennzeichnung / Année d'apposition du marquage CE / Anno in cui è stata affissa la marcatura

Signed for and on behalf of

Unterzeichnet für und im Namen von / Signé par et au nom de / Firmato in vece e per conto di

August 2019

Hayro Backy

PUSH-BUTTON WALL

Page 1 of 1

Certificate of Compliance

Certificate Number 20101222-E76003

Report Reference E76003, 2010 December 18

Issue Date 2010 December 22



Issued to:

This is to certify that representative samples of

AUXILIARY DEVICES

Series M Mushroom Stop. Cat. No. MPE followed by T, P or K, followed by 3 or 4, followed by -1 or -2, may be followed by 0, 1, 2 or 3, followed by letter to indicate

color, followed by a one or two digit number.

Have been investigated by Underwriters Laboratories Inc. (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 508 - STANDARD FOR INDUSTRIAL CONTROL EQUIPMENT - Edition

17,

CSA C22.2 NO. 14 - INDUSTRIAL CONTROL EQUIPMENT - Edition 11

Additional Information: See UL On-Line Certification Directory at www.UL.com for additional information.

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers:

our the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product

William R. Carney

Director, North American Certification Programs

Underwriters Laboratories Inc.

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized liceusee of UL. For questions, please contact a local UL Customer Service Representative at http://www.ul.com/global/eng/pages/corporate/contactus/



I-BUTTON



The I-BUTTON is an electronic key contact to enable the use of the elevator to authorised persons only, in residential buildings or professional environments where special access control is required. All push-button panels, both in the cabin and on the floors, are **I-button ready as standard**. The call with the i-button key is valid from the moment you enter the elevator until you exit to the desired floor.

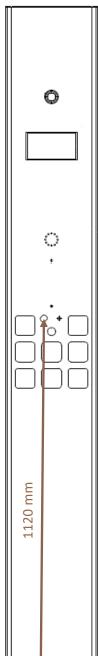
The key contact is always installed and visible even if not activated.

As option, electronic vandal-proof for accesses control are available.

To enable the call, simply place the key next to the floor push-button panel contact; if the elevator is used simultaneously by 2 or more people in possession of I-button, but directed to different floors, at the end of the first run, the restart to go to the next floor can only be made by re-enabling the device by the second passenger, on the reader located on the cabin push-button panel.



You can find it in the price list as: I-button keys and their activation (compulsory in case of multiple accesses at the same floor)



KEY AND LOAD SENSOR

On board, a machine-activation key and a load sensor are always provided as standard.

LOAD SENSOR

1155 mm

It is equipped with a red indicator light, which lights up to indicate that the maximum permitted weight in the cab has been reached. In this case, a load sensor inhibits driving until the overload on the platform ceases and the control in the cab is pressed again.



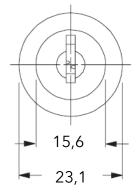
MACHINE-ACTIVATION KEY

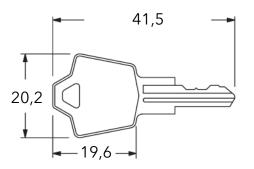
There is always a key switch that enables or disables the pushbutton panel depending on the position in which the key is rotated: 90°

- «OFF» disabled
- «ON» enabled

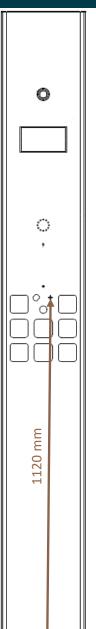
Materials:

- Switch block: Zinc alloy with stainless steel coating
- Keys: 2 brass with nickel coating





OFF



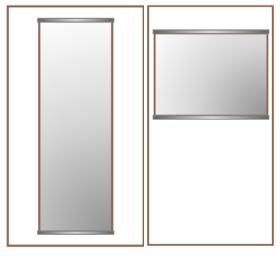
ON



WALLS

The following options are available for the walls, except the COP one:





Mirror

Available in the following versions:

- Vertical
- Horizontal

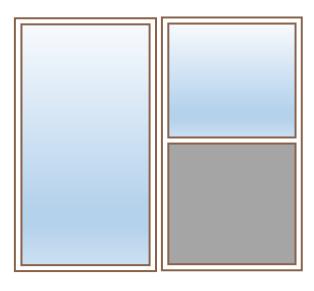
Not available with 2 cabin accesses

Transparent or smoke grey glass insert

Available for:

- Half wall
- Full wall (max 2 walls)

Not available with 2 cabin accesses







HANDLE







It is possible to install one of the following handle types, available also in 2 different formats according to the platform dimensions:

Brushed aluminum rounded handle

Length 600 mm or 895 mm In aluminum

The handle installation is made according to the following rules:



	900>	ر900	900x	1250	1000	×1250	1000	k1400	1100	x1400	1250	x900	1250	×1000	1250>	(1250	1300	x1030	1400	x1000	1400	x1100	1460)x1170
	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р	L	Р
550 mm handle	1	1	1		√		1					1		1				1		1				
800 mm handle				1		1		1	√	1	1		1		1	1	1		1		1	1	1	1

The handle **can** be fit on the COP wall. The handle **cannot** be it on the glass walls.



BACK COVER

Upon request, it is possible to cover the side walls also externally (other than the rail side). This solution, available only with steel structure, guarantees a better aesthetics in case of transparent glass cladding, especially if the installation is inside.

The colour of the rear cladded walls is usually the same as that of the interior of the cabin - however, it is also possible to create them in alternative colours.



CABIN INTERIORS

FLOORINGS

FLOORINGS- PVC AND RUBBER





The standard grey floor with stamps is made of PVC and thermoplastic rubber.

- 1. The wear layer is made of a special wear-resistant compound of PVC and thermoplastic rubber and corresponds on average to half of the total thickness of the product.
- 2. The bottom layer is made of PVC, plasticisers and mineral fillers.

MAIN CHARACTERISTICS Conforme a

Thickness	1.25 mm	EN ISO 24341
Thickness wear layer	0.62 mm	EN ISO 24340
Thick stamp embossing	ø 20 mm	
Reaction to fire	Bfl- s1 (min smoke)*	EN 13501-1
Castor chair passage resistance	Suitable	EN 4918
Slip resistance	DS ($\mu \ge 0.30$)	EN 13893
Resistance to mineral oils	Good	
Resistance to solvents	Resistant to most acids and diluted alkalis.	

GREY WITH STAMPS



FLOORING - CE CERTIFICATE

DECLARATION of PERFORMANCE DICHIARAZIONE DI PRESTAZIONE

DoP n. 112



Issued in accordance with CPR 305/2011

- Nome commerciale prodotto: COPRIPAVIMENTI
- Manufacturer's Product:
- Lotto Numero/Batch number: VEDI D.D.T.
- Article Number / Codice Articolo: ARTT. 375 395 370 390 368 391 378 379 394 396
- Uso previsto/Posa in opera in accordo allo Standard di Prodotto: Appoggiato oppure incollato a supporto incombustibile Intended usp.Laiprg in accordance to Preduct Standard: (Ex. Rested or glued on incombustible substrate
- Manufacturer's Name and address:
- Nome ed indirizzo del produttore:
- Authorized Representative Name and address (if applicable):
- Nome ed indirizzo del Legale Rappresentante (se applicabile):
- Sistema di Valutazione e Verifica della Costanza di Prestazione del Prodotto: SISTEMA 1
 - Assessment and Verification of constancy of performance: System 1
- Riferimento allo Standard di Prodotto: EN 14041 "Rivestimenti resilienti, tessili e laminati per pavimentazioni - Caratteristiche essenziali" Reference to the Harmonised Standard: EN 14041 "Resilient, textile and laminate foor coverings - Essential

characteristics",

Nome ed indirizzo dell'Organismo Notificato (NB) Notified Body (NB) name and address LA.P.I. LABORATORIO PREVENZIONE INCENDI SPA Via della Quercia, 11- Loc. La Querce 59100 PRATO - ITALY



Laboratorio Prevenzione Incendi Sp.A Notified Body Nº 0987

Certificate C C of evaluation and verification of Constancy of Performance of product: n. 112

PRESTAZIONE DICHIARATA

Caratteristiche / Characteristics	Prestazione / Performance	Standard di Prodotto/Harmonised Standard
Euroclasse di reazione al fuoco secondo la norma EN 13501-1: Reaction to fire Class in accordance to EN 13501-1:	Bfl-s1	,
Scivolosità - Siep resistence	N.P.D.	70.74.444
Classe di formaldeide - formaldehyde class	E1	EN 14041

La Prestazione del Prodotto è in accordo alle specifiche dichiarate sopra

The Performance of the product is in accordance with the specification given above

Segnature/Firma: Name/Nome: Position/Posizione: Presidente

Title/ Titolo:

Date/ Data: vedi ddt allegato





FLOORINGS - PVC





The optional floors are of heterogeneous vinyl and anti-slip type (PVC): Made of sheets of phthalate-free polyvinyl chloride, it consists of 3 indelaminable layers, protected by a polyurethane finish (PUR) and complying with all the requirements of <u>EN 13845</u>.

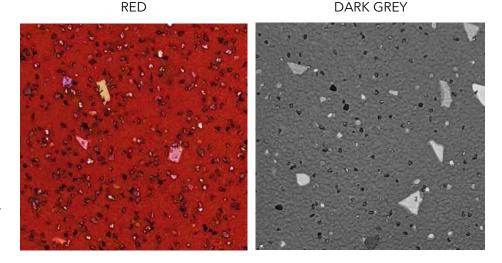
The anti-slip property is guaranteed for the entire floor lifecycle.

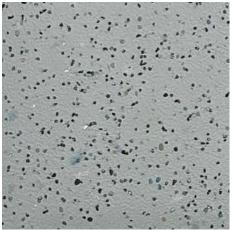
- 1. The wear layer of 0.7 mm, in pure coloured PVC (reinforced with slip resistant particles for dark grey, light grey and red finishes), is refined with a PUR (polyurethane) surface finish that guarantees ease of ordinary and extraordinary maintenance.
- 2. The impregnated glass fibre interlayer provides excellent dimensional stability and flexibility for easy installation.
- 3. The last layer, a compact substrate made of recycled vinyl and controlled up to a maximum of 70%, ensures excellent resistance to residual impressions.

Designed and manufactured in Europe using 100% green energy. Compliant with <u>EN-ISO 10582</u> and <u>EN 14041</u> and CE certified. The production unit is <u>ISO 9001</u> and <u>14001</u> certified.



The installation and maintenance of the flooring must comply with the norm <u>UNI 11515-1 2015</u>.







LIGHT GREY WILD PEAR

FLOORINGS- TECHNICAL SPECS



MAIN CHARACTERISTICS		Compliant to
Thickness	2.0 mm	EN ISO 24341
Thickness wear layer	0.7 mm	EN ISO 24340
Weight	2.75 kg/m²	EN ISO 23997
Usage class	34 + 43	EN ISO 10874
Residual indentation	≤ 0.05 mm	EN 13501-1
Reaction to fire	Bfl- s1 (min smoke)	EN 4918
Castor chair passage resistance	suitable	EN 660-1
Abrasion resistance	T group	EN 13845
Anti-slip properties	ESf < 10% thickness loss after 50,000 revolutions, R11	EN 13893
Slip resistance	DS ($\mu \ge 0.30$)	EN ISO 23999
Dimension stability	< 0,1%	EN ISO 24344
Flexibility	Ø 10 mm	EN ISO 105 B 02 EN ISO 16581
Light fastness	≥ 6 blue scale	EN 12524
Thermal conductivity	0.25 W/ (mK)	EN 1815
Body voltage	$E \le 2 \text{ kV (anti-static)}$	EN ISO 26897
Resistance to chemicals	Very good	EN ISO 16000 (ISO 10580)









FLOORINGS - CERTIFICATES

CE

DICHIARAZIONE DI PRESTAZIONE

Codice di identificazione unico dei prodotto-tipo:

0200101-DoP-306

2. Numero di tipo, lotto, serie o quaisiasi aitro elemento che consenta l'identificazione dei prodotto da costruzione al sensi dell'articolo 11, paragrafo 4:

(EN 13845)

3. Uso o usi previsti dei prodotto da costruzione, conformemente alia relativa specifica tecnica armonizzata, come previsto dal fabbricante:

Per l'uso come pavimentazione in edifici (vedi EN 14041) secondo le specifiche del produttore.

- 4. Nome, denominazione commerciale registrata o marchio registrato e indirizzo dei fabbricante ai sensi dell'articolo 11, paragrafo 5:
- 5. Se opportuno, nome e indirizzo del mandatario il cui mandato copre i compiti cui all'articolo 12, paragrafo 2:
- 6. Sistema o sistemi di valutazione e verifica della costanza della prestazione dei prodotto da costruzione di cui all'allegato V:

Sistema 3

Nel caso di una dichiarazione di prestazione relativa ad un prodotto da costruzione che rientra nell'ambito di applicazione di una norma armonizzata:
 Nome dell'ente certificatore che ha rilasciato il rapporto di prova sulla base dei campione inviato dai produttore.

TÜV Rheinland Nederland B.V. Josink Esweg 10 7545 PN Enschede, Netherlands Notified laboratory n°336

8. Nel caso di una dichiarazione di prestazione relativa ad un prodotto da costruzione per il quale è stata rilasciata una valutazione fecnica europea:

non applicabile

Prestazione dichiarata		
Caratteristiche essenziali	Prestazione	Specifica tecnica armonizzata
Comportamento al fuoco	Con 1	EN 14041: 2004/AC:2006
Pentaclorofenolo	DL PCP	EN 14041: 2004/AC:2006
Emissione di formaldeide	NA HGHO	EN 14041: 2004/AC:2006
Resistenza allo scivolamento	**************************************	EN 14041: 2004/AC:2006
Comportamento all'elettricità (dissipativo)	NPD	EN 14041: 2004/AC:2006
Comportamento all'elettricità (conduttivo)	NPD	EN 14041: 2004/AC:2006
Comportamento all'elettricità (antistatico)	NPD	EN 14041: 2004/AC:2006
Conduttività termica [W/mK]	0.25 W/m.K	EN 14041: 2004/AC:2006
Tenuta stagna	NPD	EN 14041: 2004/AC:2006

10. La prestazione del prodotto di cui al punti 1 e 2 è conforme alla prestazione dichiarata di cui al punto 9. Si filascia la presente dichiarazione di prestazione sotto la responsabilità esclusiva del fabbricante di cui al punto 4. Firmato a nome e per conto di:

Director Operations: David Glancy

Coevorden, 30-6-2013



ENVIRONMENTAL PRODUCT DECLARATION



FLOORINGS

Resilient Heterogeneous Vinyl Floor Covering

According to ISO 14025 and EN 15804

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. <u>Exclusions</u>: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address



benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. <u>Accuracy of Results</u>: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. <u>Comparability</u>: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

PROGRAM OPERATOR	UL Environment 333 Pfingsten Road	
	Northbrook, IL 60611	
DECLARATION HOLDER		
DECLARATION NUMBER	4788294459.106.1	
DECLARED PRODUCT	Resilient Heterogeneous Vin	yl Floor Covering
REFERENCE PCR	EN 16810: Resilient, Textile and Lan declarations – Product category rule:	ninate floor coverings – Environmental product s
DATE OF ISSUE	July 19, 2018	
PERIOD OF VALIDITY	5 Years	
CONTENTS OF THE DECLARATION	Product definition and information ab Information about basic material and Description of the product's manufact Indication of product processing Information about the in-use condition Life cycle assessment results Testing results and verifications	the material's origin ture
The PCR review was conduct	ed by:	FOR Review Failer
This declaration was independ 14025 by Underwriters Labora	dently verified in accordance with ISO atories	Grant R. Martin
□ INTERNAL	⊠ EXTERNAL	Grant R. Martin, UL Environment
This life cycle assessment wa accordance with ISO 14044 a		Homes Sprin
		Thomas P. Gloria, Industrial Ecology Consultants

This EPD conforms with EN 15804



FLOORINGS - FLOORING KIT AT CUSTOMER'S CHOICE

As alternative to the 8 floors available in the E10 catalogue, it is also possible to fit a flooring at customer's choice. In this case, Vimec provides a **kit** including customized brackets to host the floor without any additional operations.

Vimec asks for the following information in order to prepare the right kit:

- Material
- Estimated thickness Vimec guarantees that the kit can fit floors with a maximum thickness of 20 mm.
- Weight Vimec estimates a maximum weight of 20 kg/m2.
- Any additional operation to be performed inside the cabin to fit the floor.

For floors with a thickness or weight greater than the above, a specific evaluation by the Technical Department is required.

The dimension will be adapted to the chosen platform.



For the installation, it is not necessary to make any hole in the floor!

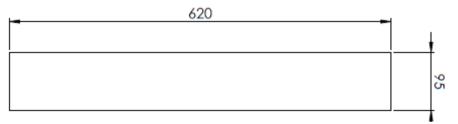


CABIN INTERIORS

CEILING AND LIGHTING

The E10 ceiling is made in the same finish as the walls (including stainless steel finishes) and features an LED bar positioned above the COP.

The dimensions of the ceiling are proportional to the dimensions of the cabin, while the LED bar has the following dimensions:



The LED bar consists of 2 LED strips, contained within a steel housing, and a 2 mm thick white polycarbonate diffuser.



As an option, it is possible to order the "starry sky" ceiling version consisting of a polycarbonate diffuser of the same extension as the roof and 4 LED strips arranged in pairs. In this case, the steel sheet is always of the coated type and standard colour grey (this ceiling is not available in stainless steel finishes).



LED STRIP CHARACTERISTICS

Power supply: 12VDC

Length: 500mm

Temperature and colour: >=6000-7000K

Lumen: >= 900lm/m

In the event of a blackout, the lights in the cab always stay on.





LIGHTING - ELEVATOR SHAFT

In accordance with the European Directive 2006/42/EC 1.1.4, all internal components requiring frequent inspection, adjustment and maintenance must be equipped with adequate lighting - for this reason, an auxiliary **LED lighting** system for the **shaft** is now available which can also be easily installed on existing systems.



The kit consists of a reel of white LED strips, available in **5, 11 or 20 metre** versions, and only requires a dedicated electrical socket and switch.

The LED strips are fixed along the rail side with fixing clips supplied in the kit. The kit can be installed in both masonry and metal structure.

MAIN CHARACTERISTICS	
Input voltage	230VAC +/- 10% 50 / 60 Hz
Max. current	0.5 A
Lumens/m	400 L/m
Working temperature	-10 / 40° C
Degree protection	<u>IP65</u>
Length (m)	5, 11 o 20
Dimensions	11.3 x 7.5 mm





DOORS and ACCESSES

DOORS AND ACCESSES - SALES MEMO

✓ Limits:

Access per floor: Max 2

Cabin doors:Max 2

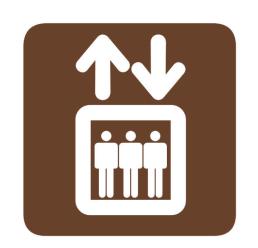
Access per installation (std):

Floors served (std): Max 5

It is possible, prior to a dedicated project and approval by Technical Dept, to build a machine with more accesses or served floors.

Load capacity (kg) variation according to the doors

Cabin type	E10 Standard	E10 HL / LT
Cabin without doors	400	500
Cabin with 1 automatic cab door	300	400
Cabin with 1 glass telescopic door	-	350
Cabin with 2 automatic cab doors	300	400





DOORS AND ACCESSES- SALES MEMO

SWING DOORS - Overview

Standard	N.B.
> Dead man's manoeuvre in cabin	
➤ Landing call with single touch	
> Full height infrared barrier	
> Door closer	Door automation available as option
> Locks always present	Kit also available
> VIMEC 7040	7038 for fire rated or fire-proof doors



DOORS AND ACCESSES - SALES MEMO

AUTOMATIC DOORS - Overview

Standard	N.B.			
> Automatic manoeuvre in cabin	Maximum depth (rail side - door side			
➤ Landing call with single touch	distance): • 1250 mm for all telescopic doors			
> Safety block for cabin doors (with more than 2 stops)	(1400x900 and 1400x1140 platforms			
> Full height infrared barrier	 are not available with telescopic doors) 1170 mm for glass telescopic doors (HL 			
> Similinox finish	version only)			

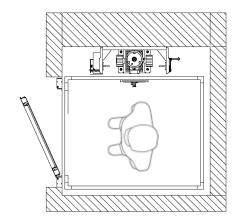


The information contained in the following slide refer to both **cabin doors** and **floor doors**.

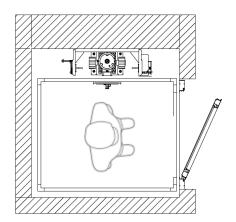
Different door types are available according to the opening mode:

- Single-hinged (floor only)
- Double-hinged (floor only)
- Telescopic automatic (both cabin and floor)

All the doors can be provided with right-hand or left-hand side opening (considering opening the door from inside of the cabin, standing in front of the door).



Left-hand side opening



Right-hand side opening

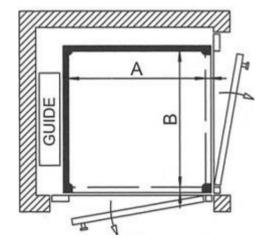


DOORS AND ACCESSES - OVERVIEW

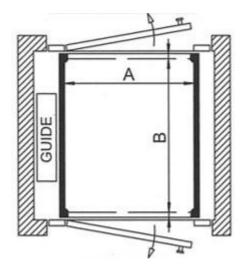
The maximum number of accesses on each floor is 2, for a total of 6 accesses per structure (given the maximum 5 stops as standard).

Access type can be:

Adjacent



• Opposite (passing-through)





DIMENSIONS - STANDARD

Standard door height = 2000 mm (alternative heights = 2100 mm, 2200 mm) Standard cabin height = 2100 mm

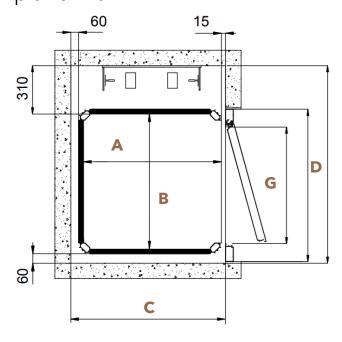
WIDTH	600	650	700	750	800	860	900	950	1000
Panel door (single-hinged)	•	•	•	•	•	•	•	•	•
Panoramic panel door (single-hinged)					•	•	•		
Aluminum panoramic door (single-hinged)	•	•	•	•	•	•	•	•	•
Double-hinged door			•	•	•		•		•
Automatic telescopic 2 panel door			•	•	•		•		
Automatic telescopic 3 panel door	•	•	•	•	•		•		
Automatic telescopic 4 panel door				•	•		•		
El fire-rated door	•	•	•	•	•	•	•	•	•
UK FIREPROOF door	•	•	•	•	•	•	•	•	•



DIMENSIONS - MASONRY SHAFT WITH SWING DOOR

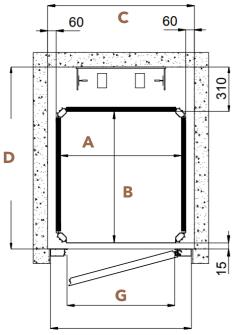


The next slides contain some indications on the maximum door width allowed with the more common platforms. Moreover, some suggestions are given on the minimum dimensions of masonry shaft/metal structure according to the different platforms.



Side entrance

	PLATE	ORM	DOOR	SHAFT		
				G	С	D
Α	В	A*	B*	WIDTH (max)	WIDTH (min)	DEPTH (min)
900	900	870	870	800	975	1270
1250	1000	1220	970	860	1325	1370
1400	1100	1340	1070	950	1475	1470



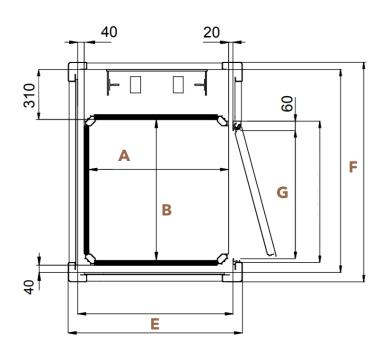
Front entrance

	PLATI	ORM		DOOR	SHAFT		
				G	Е	F	
А	В	A*	B*	WIDTH	WIDTH	DEPTH	
				(max)	(min)	(min)	
900	900	840	900	750	1020	1225	
1250	1000	1190	1000	1000	1370	1325	
1400	1100	1340	1100	1000	1520	1425	



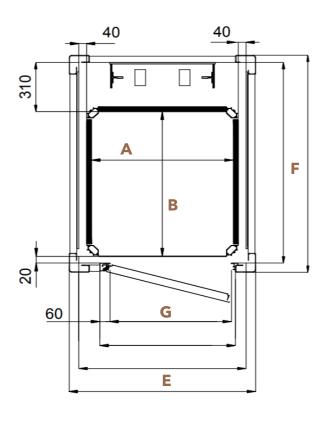
DIMENSIONS - METAL STRUCTURE WITH SWING DOOR





Side entrance

	PLATI	ORM		DOOR	STRUC	CTURE
				G	Е	F
А	В	A*	B*	WIDTH	WIDTH	DEPTH
				(max)	(min)	(min)
900	900	870	870	790	1075	1355
1250	1000	1220	970	890	1425	1455
1400	1100	1370	1070	990	1575	1555



Front entrance

	PLATI	ORM		DOOR	STRUCTURE		
				G	Е	F	
Α	В	A*	B*	WIDTH	WIDTH	DEPTH	
				(max)	(min)	(min)	
900	900	840	900	800	1095	1335	
1250	1000	1190	1000	1000	1445	1435	
1400	1100	1340	1100	1000	1595	1535	



DIMENSIONS - MASONRY SHAFT WITH 2 SWING DOORS



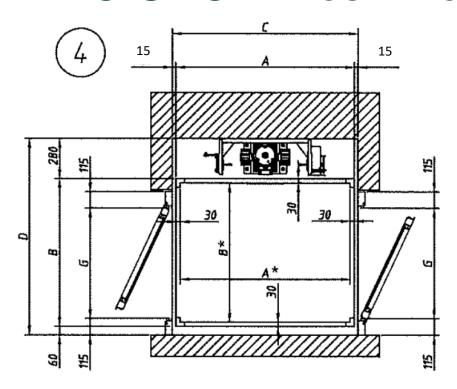
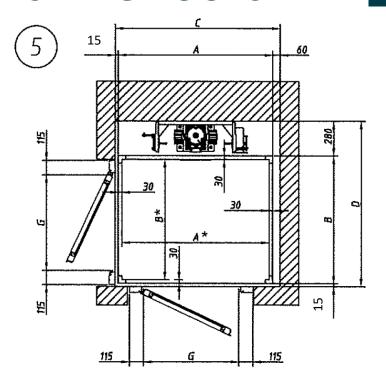




	PLATE	ORM		DOOR 1	DOOR 2	SHAFT		
				G' (B)	G (B)	С	D	
А	В	A*	B*	WIDTH	WIDTH	WIDTH	DEPTH	
				(max)	(max)	(min)	(min)	
900	900	870	870	800	800	930	1270	
1250	1000	1220	970	860	860	1280	1370	
1400	1100	1370	1070	900	900	1430	1470	



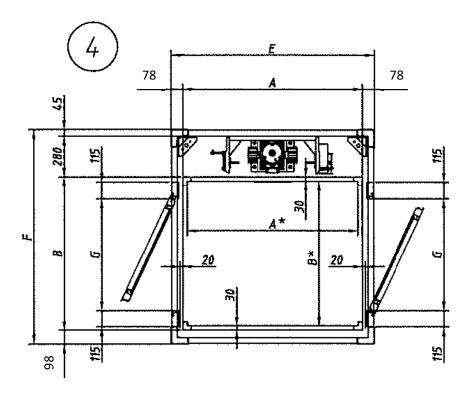
Adjacent entrances

	PLATI	FORM		DOOR 1	DOOR 2	SH	AFT
			G' (B)	G (B)	С	D	
Α	В	A*	B*	WIDTH	WIDTH	WIDTH	DEPTH
				(max)	(max)	(min)	(min)
900	900	840	900	700	700	975	1225
1250	1000	1190	1000	900	800	1325	1325
1400	1100	1340	1100	900	900	1475	1425



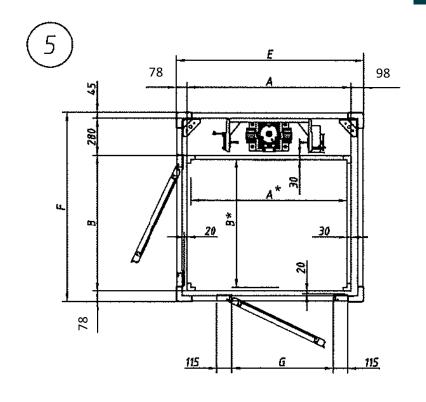
DIMENSIONS - METAL STRUCTURE WITH 2 SWING DOORS





Opposite entrances

	PLATI	ORM		DOOR 1	DOOR 2	STRU	CTURE
			G' (B)	G (B)	Е	F	
А	В	Α*	B*	WIDTH	WIDTH	WIDTH	DEPTH
				(max)	(max)	(min)	(min)
900	900	870	870	790	790	1055	1355
1250	1000	1220	970	890	890	1405	1455
1400	1100	1370	1070	990	990	1555	1555



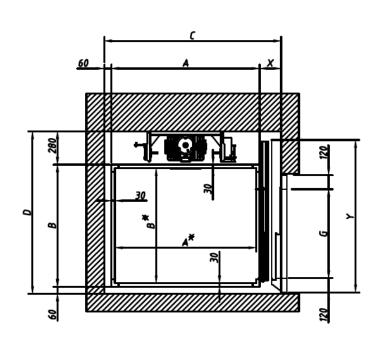
Adjacent entrances

	PLATI	FORM		DOOR 1	DOOR 2	STRUC	CTURE
			G' (B)	G (B)	Е	F	
А	В	A*	B*	WIDTH	WIDTH	WIDTH	DEPTH
				(max)	(max)	(min)	(min)
900	900	840	900	800	790	1075	1335
1250	1000	1190	1000	1000	890	1425	1435
1400	1100	1340	1100	1000	990	1575	1535



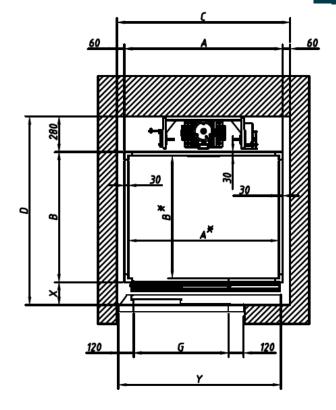
DIMENSIONS - MASONRY SHAFT WITH TELESCOPIC DOOR





		DOOR ENCU	MBRANCE (Y)
		T2	Т3
TH	700	1265	1145
M (5)	750	1340	1215
DOOR WIDTH (G)	800	1415	1280
8	900	1565	1415

THRESOLD (X)						
180	215					



Side entrance with T2 DOOR

	PLATFORM			DOOR	SHA	AFT	PLATFORM				DOOR	SHAFT	
			G	С	D					G	С	D	
А	В	B A* B*	В*	WIDTH (max)	WIDTH (min)	DEPTH (min)	А	В	A*	В*	WIDTH (max)	WIDTH (min)	DEPTH (min)
1250	1000	1190	970	700	1490	1340	1250	1000	1190	970	700	1525	1340
1300	1030	1240	1000	750	1540	1370	1300	1030	1240	1000	750	1575	1370
1400	1100	1340	1070	800	1640	1440	1400	1100	1340	1070	800	1675	1440
1460	1170	1400	1140	800	1700	1510	1460	1170	1400	1140	800	1735	1510

Side entrance with T3 DOOR

Front entrance with T2 DOOR

	PLATI	ORM		DOOR	SHAFT	
				G	С	D
А	В	A*	В*		WIDTH (min)	DEPTH (min)
1250	1000	1190	970	750	1370	1460
1300	1030	1240	1000	800	1420	1490
1400	1100	1340	1070	800	1520	1560
1460	1170	1400	1140	900	1580	1630

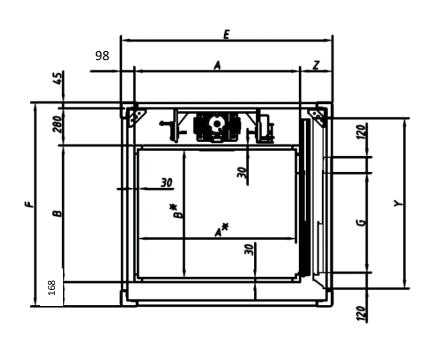
Front entrance with T3 DOOR

	PLATI	FORM		DOOR	SHAFT		
				G	С	D	
А	В	A*	6 B*	WIDTH (max)	WIDTH (min)	DEPTH (min)	
1250	1000	1190	970	750	1370	1495	
1300	1030	1240	1000	800	1420	1525	
1400	1100	1340	1070	800	1520	1595	
1460	1170	1400	1140	900	1580	1665	



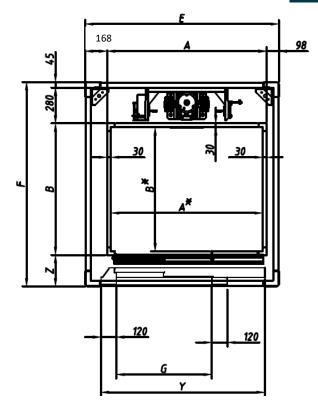
DIMENSIONS - METAL STRUCTURE WITH TELESCOPIC DOOR





	DOOR ENCUMBRANCE (Y		
		T2	Т3
Ŧ	700	1265	1145
WID.	750	1340	1215
DOOR WIDTH (G)	800	1415	1280
0	900	1565	1415

THRES	OLD (Z)
245	280



Side entrance with T2 DOOR

	PLATI	ORM	DOOR	STRUC	CTURE	
				G	Е	F
А	В	A*	В*			DEPTH (min)
1250	1000	1190	970	800	1595	1525
1300	1030	1240	1000	800	1645	1555
1400	1100	1340	1070	900	1745	1625
1460	1170	1400	1140	900	1805	1695

Side entrance with T3 DOOR

	PLATI	ORM	DOOR	STRUC	CTURE	
					Е	F
А	В	A*	B*		WIDTH (min)	DEPTH (min)
1250	1000	1190	970	800	1630	1525
1300	1030	1240	1000	800	1680	1555
1400	1100	1340	1070	900	1780	1625
1460	1170	1400	1140	900	1840	1695

Front entrance with T2 DOOR

	PLATI	ORM	DOOR	STRUC	CTURE	
				G	Е	F
А	В	A*	B*	WIDTH (max)	WIDTH (min)	
1250	1000	1190	970	800	1515	1600
1300	1030	1240	1000	800	1565	1630
1400	1100	1340	1070	900	1665	1700
1460	1170	1400	1140	900	1725	1770

Front entrance with T3 DOOR

		PLATI	ORM	DOOR	STRUC	CTURE	
					G	Е	F
	А	В	A*	B*		WIDTH (min)	
ĺ	1250	1000	1190	970	900	1515	1635
	1300	1030	1240	1000	900	1565	1665
	1400	1100	1340	1070	900	1665	1735
	1460	1170	1400	1140	900	1725	1805

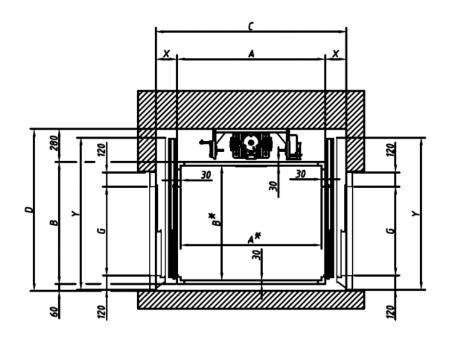


DIMENSIONS - MASONRY SHAFT WITH 2 TELESCOPIC DOORS



	DOOR ENCUMBRANCE			
		T2	Т3	
Ε	700	1265	1145	
Μ Θ	750	1340	1215	
DOOR WIDTH (G)	800	1415	1280	
ă	900	1565	1415	

THRESOLD (X)			
180	215		



Opposite entrances with T2 doors

	PLATFORM			DOOR 1	DOOR 2	SH	AFT
				G' (A)	G (B)	С	D
А	В	A*	В*	WIDTH (max)	WIDTH (max)	WIDTH (min)	DEPTH (min)
1250	1000	1190	970	700	700	1610	1340
1300	1030	1240	1000	750	750	1660	1370
1400	1100	1340	1070	800	800	1760	1440
1460	1170	1400	1140	800	800	1820	1510

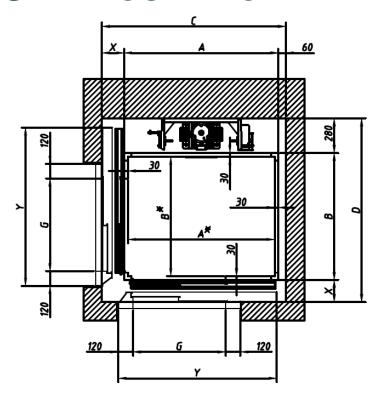
Opposite entrances with T3 doors

	PLATE	ORM		DOOR 1	DOOR 2	SHA	AFT
				G' (A)	G (B)	С	D
А	В	A*	B*	WIDTH (max)	WIDTH (max)	WIDTH (min)	DEPTH (min)
1250	1000	1190	970	700	700	1680	1340
1300	1030	1240	1000	750	750	1730	1370
1400	1100	1340	1070	800	800	1830	1440
1460	1170	1400	1140	800	800	1890	1510



DIMENSIONS - MASONRY SHAFT WITH 2 TELESCOPIC DOORS





		DOOR ENCUMBRANCE (Y)		
		T2	Т3	
Ŧ	700	1265	1145	
MID.	750	1340	1215	
DOOR WIDTH (G)	800	1415	1280	
Ď	900	1565	1415	

THRESOLD (X)			
180	215		

Adjacent entrances with T2 doors

	PLATFORM					DOOR 2	SHA	AFT
					G' (A)	G (B)	С	D
А		В	A*	* B*	WIDTH (max)	WIDTH (max)	WIDTH (min)	DEPTH (min)
125	0 10	000	1190	970	800	800	1490	1460
130	0 10	030	1240	1000	800	800	1540	1490
140	0 11	100	1340	1070	900	800	1640	1560
146	0 11	170	1400	1140	900	900	1700	1630

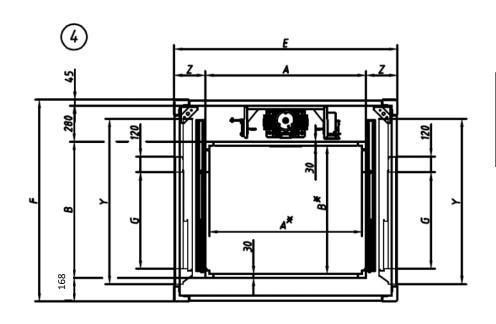
Adjacent entrances with T3 doors

	PLATI	ORM		DOOR 1	DOOR 2	SHA	AFT
			G' (A)	G (B)	С	D	
А	В	A*	В*	WIDTH (max)	WIDTH (max)	WIDTH (min)	DEPTH (min)
1250	1000	1190	970	900	900	1525	1495
1300	1030	1240	1000	900	900	1575	1525
1400	1100	1340	1070	900	900	1675	1595
1460	1170	1400	1140	900	900	1735	1665



DIMENSIONS - METAL STRUCTURE WITH 2 TELESCOPIC DOORS





		DOOR ENCUMBRANCE (Y)			
		T2	Т3		
DOOR WIDTH (G)	700	1265	1145		
	750	1340	1215		
	800	1415	1280		
	900	1565	1415		

THRESOLD (Z)						
245	280					

Opposite entrances with T2 doors

	PED	ANA		PORTA 1	PORTA 2	STRUT	TURA
				G' (A)	G (B)	Е	F
А	В	A*	В*	LARG. (max)	LARG. (max)	LARG. (min)	PROF. (min)
1250	1000	1190	970	800	800	1740	1525
1300	1030	1240	1000	800	800	1790	1555
1400	1100	1340	1070	900	900	1890	1625
1460	1170	1400	1140	900	900	1950	1695

Opposite entrances with T3 doors

	PED	ANA		PORTA 1	PORTA 2	STRUT	TURA
				G' (A)	G (B)	Е	F
А	В	A*	В*	LARG. (max)	LARG. (max)	LARG. (min)	PROF. (min)
1250	1000	1190	970	900	900	1810	1525
1300	1030	1240	1000	900	900	1860	1555
1400	1100	1340	1070	900	900	1960	1625
1460	1170	1400	1140	900	900	2020	1695

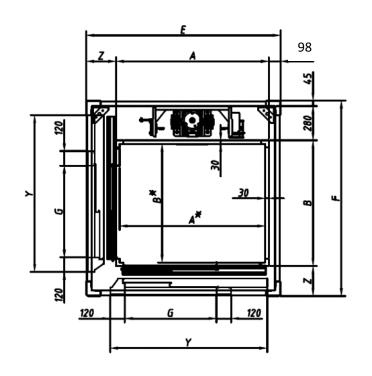


DIMENSIONS - METAL STRUCTURE WITH 2 TELESCOPIC DOORS



		DOOR ENCUMBRANCE (Y)		
		Т2	Т3	
E	700	1265	1145	
MID.	750	1340	1215	
DOOR WIDTH (G)	800	1415	1280	
<u> </u>	900	1565	1415	

THRESOLD (Z)						
245	280					



Adjacent entrances with T2 doors

	PED	ANA		PORTA 1	PORTA 2	STRUT	TURA
				G' (A)	G (B)	Е	F
А	В	A*	В*	LARG. (max)	LARG. (max)	LARG. (min)	PROF. (min)
1250	1000	1190	970	900	800	1595	1600
1300	1030	1240	1000	900	900	1645	1630
1400	1100	1340	1070	900	900	1745	1700
1460	1170	1400	1140	900	900	1805	1770

Adjacent entrances with T3 doors

	PED	ANA		PORTA 1	PORTA 2	STRUT	TURA
			G' (A)	G (B)	Е	F	
А	В	A*	В*	LARG. (max)	LARG. (max)	LARG. (min)	PROF. (min)
1250	1000	1190	970	900	900	1630	1635
1300	1030	1240	1000	900	900	1680	1665
1400	1100	1340	1070	900	900	1780	1735
1460	1170	1400	1140	900	900	1840	1805



DIMENSIONS - HEADROOM VARIATIONS



Door type	Door height (mm)	Cabin height (mm)	Headroom height (mm)	
		2000	2450	standard
	2000	2100	2500	
Cwing		2200	2600	
Swing	2100	2100	2500	
	2100	2200	2600	
	2200	2200	2600	
	2000	2100	2600	standard
	2000	2200	2650	
Telescopic*	2100	2100	2650	
	2100	2200	2750	
	2200	2200	2750	



^{*}All glass telescopic doors are equipped with a 10 mm dust protection seal in the lower side.

^{*}In case of telescopic doors with Similinox finish, the only height available is 2000 mm

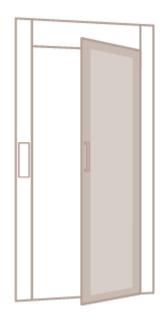
SINGLE-HINGED - TYPES



The following types of single-hinged doors are available:

- **Panel steel door** with or without view
- Panoramic panel steel door con with transparent or smoke-grey glass
- **Panoramic aluminum** door with transparent, smoke-grey, milky or <u>STOPSOL</u> glass
- **Fire-rated** EN-8158 El 60 or El 120 with or without window
- **FIREPROOF** (UK) with or without window

Single-hinged doors comes with **dead man's manoeuvre (manual) as standard.** The landing call, instead is always automatic, both with mechanical and touch push-button. A **door closer** is included in the standard equipment allowing the semi-automatic closing of the hinged door. **Door automation** is available as option (see dedicated <u>slide</u>).



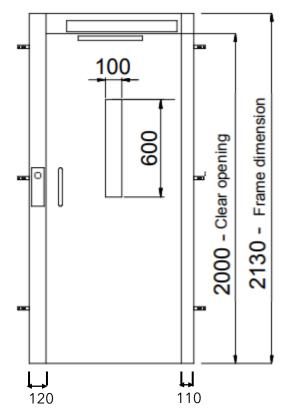
All types of hinged doors are compliant to the norm <u>EN 81.41-2011</u>, particularly to what is indicated at par. 5.8.2 "swing hinged landing doors", point d) "Openings giving access to the platform shall be provided with landing doors which require a force to open them which is not more than 40 N at the handle".



SINGLE-HINGED - TYPES AND DIMENSIONS

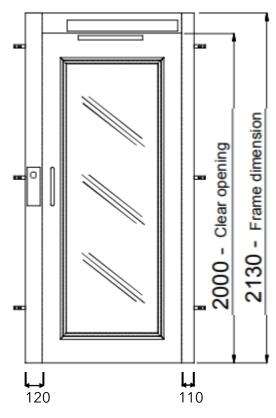


Steel door with window



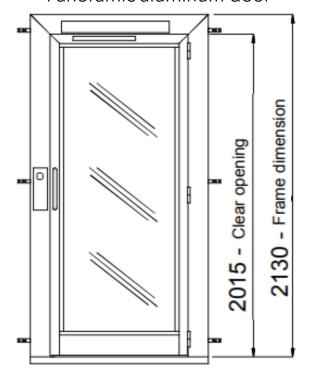
Only for indoor installationAvailable also without window

Panoramic steel door

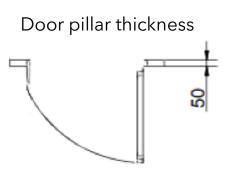


Only for indoor installation

Panoramic aluminum door



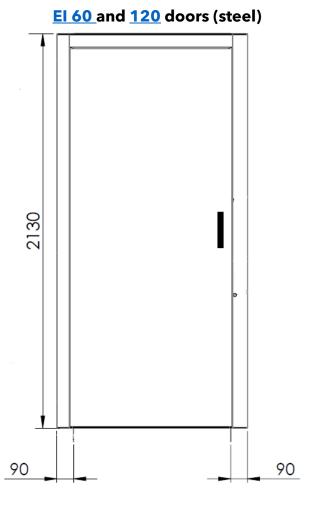
The entire structure, frame included, is made of aluminum





SINGLE-HINGED - TYPES AND DIMENSIONS

SWING DOORS



All these doors are in 7038 as standard (other RAL colours are available as option)





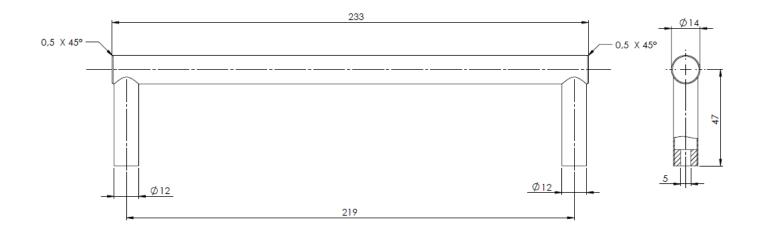


SINGLE-HINGED - HANDLE



The standard handle for single-hinged doors is installed next to the floor push-button panel, 980 mm height from the ground.

- In brushed stainless steel
- Weight 0,22kg







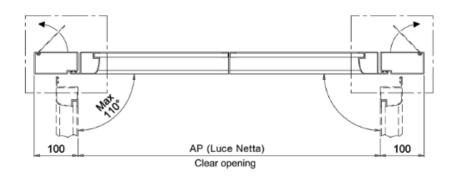
DOUBLE-HINGED

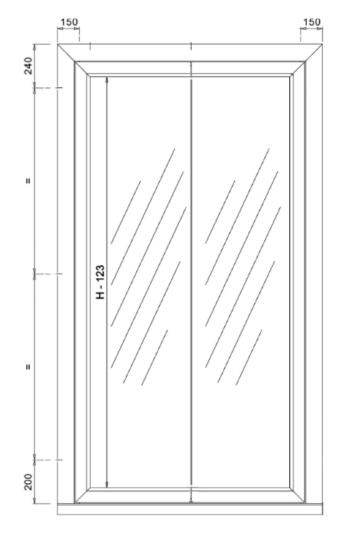
swing doors

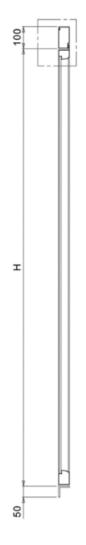
The new double-hinged swing doors are made of painted aluminium in Vimec 7040 colour. They come with standard door automation which is integrated in the upper crosspiece of the door.

Landing call is always automatic. The FULL VISION glass is available only in transparent type.

Locks integrated











DOOR SAFETY LOCK



All hinged doors are equipped with a device included in the landing door lock that allows the cabin to move only if the door is completely locked.

The locks ensure that the door is closed when the elevator is not on the landing floor and are also electrically interconnected to prevent the elevator from operating if any of the floor doors are open. In case of forced opening of the doors, the interlocking circuit is interrupted, causing the E10 to stop immediately, preventing the danger of falling into the travel compartment.



All the doors supplied by Vimec and their locking devices have a mechanical strength such that, when a force of 300 N, being evenly distributed over an area of 5 cm² in round or square section, is applied, they resist without breakage, permanent deformation and/or elastic deformation greater than 15 mm and they maintain their safety function, during and after such test.



LOCKS - SINGLE-HINGED

SWING DOORS

All swing doors are supplied complete with **electromechanical locks** - the lock not only locks the landing doors mechanically, but also has an electrical contact that prevents the doors from being forced from the inside. Thanks to the «electro-mechanical» redundancy, it is not possible to set the machine in motion with the door open or not correctly closed, in compliance with the lift standard EN 81-20.

MAIN CHARACTERISTICS

Homologations			
Certificates	TÜV CCC EAC		
General information			
Standards	EN 81-20 EN 81-50		
Enclosure material	Light alloy die- casting		
Material of the electrical contacts	Silver		
Material of the latching bolt	Brass		
Characteristics			
Manual release	Yes		
With fail-safe locking system	Yes		
Safety functions	Yes		
Mechanical data			
Orientation / Alignment	Left/right		
ceramic oxide magnets with high coercive field strength			

Dimensions	
Width	165 mm
Height	80 mm
Ambient conditions	
Protection class	<u>IP20</u>
Ambient temperature, minimum	-15 °C
Ambient temperature, maximum	+70 °C
Ambient conditions - Insulation value	
Rated impulse withstand voltage	6 kV
Electrical data	
Thermal test current	10 A
Utilisation category AC-15	230 VAC
Utilisation category AC-15	2 A
Utilisation category DC-13	200 VDC
Utilisation category DC-13	2 A





- Metal enclosure
- Fail-safe locking system
- Manual release by means of triangular key



LOCKS - DOUBLE-HINGED

SWING DOORS

MAIN CHARACTERISTICS

Homologation	
Certificates	TÜV CCC EAC
General information	
Standards	EN 81-20 EN 81-50
Enclosure material	Light alloy die- casting
Material of the electrical contacts	Silver
Material of the latching bolt	Brass
Characteristics	
Manual release	Yes
With fail-safe locking system	Yes
Safety functions	Yes
Mechanical data	
Orientation / Alignment	Left/right

Dimensions	
Width	285 mm
Height	80 mm
Ambient conditions	
Protection class	<u>IP20</u>
Ambient temperature, minimum	-15 °C
Ambient temperature, maximum	+70 °C
Ambient conditions - Insulation value	
Rated impulse withstand voltage	6 kV
Electrical data	
Thermal test current	10 A
Utilisation category AC-15	230 VAC
Utilisation category AC-15	2 A
Utilisation category DC-13	200 VDC

2 A





All locks are compliant with EN 81-41 (par. 5.8.5.2) which prescribes that "the electrical safety contact shall not close until the locking elements are engaged by at least 7 mm".

In addition, heated locks for swing doors are available

You can find it in the price list as: Gearbox oil heating device for temperatures below -5°C (included)

Utilisation category DC-13



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EU TYPE-EXAMINATION CERTIFICATE

According to Annex IV, Part A of 2014/33/EU Directive

Certificate No.: EU-DL 059

TÜV SÜD Industrie Service GmbH Certification Body

of the Notified Body: Westendstr. 199 80686 Munich - Germany

Identification No. 0036

Certificate Holder:

Manufacturer of the Test Sample: (Manufacturer of Serial Production see Enclosure)

Product: Locking device with bolt type locking element and

means used to prove the position of a locking element with positive operation for direct locking action of single-winged hinged landing doors

AV 15 Type:

Directive: 2014/33/EU

Reference Standards: EN 81-20 :2014

EN 81-50:2014

EN 81-1:1998+A3:2009

EN 81-2:1998+A3:2009

Test Report: EU-DL 059 of 2016-04-08

Outcome: The safety component conforms to the essential

health and safety requirements of the mentioned Directive as long as the requirements of the

TUV®

annex of this certificate are kept.

Date of Issue: 2016-04-26















CERTIFICATE

.

ZERTIFIKAT





Date of Issue:









EU TYPE-EXAMINATION CERTIFICATE

According to Annex IV, Part A of 2014/33/EU Directive

Certificate No.: EU-DL 060

Certification Body TÜV SÜD Industrie Service GmbH

of the Notified Body: Westendstr. 199

80686 Munich - Germany Identification No. 0036

Certificate Holder:

Manufacturer of the Test Sample: (Manufacturer of Serial Production see Enclosure)

Product: Locking device with two bolt type locking

elements and means used to prove the position of a locking element with positive operation for direct locking action of double-winged hinged

landing doors

Type: AV 25

Directive: 2014/33/EU

Reference Standards: EN 81-20 :2014

> EN 81-50:2014 EN 81-1:1998+A3:2009 EN 81-2:1998+A3:2009

EU-DL 060 of 2016-04-08

The safety component conforms to the essential health and safety requirements of the mentioned

Directive as long as the requirements of the

annex of this certificate are kept.

2016-04-26

DOOR CLOSER



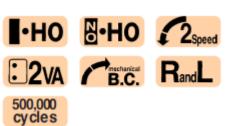


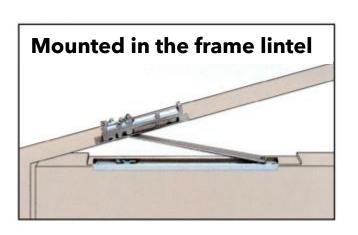
All the single-hinged doors are equipped with a flush-mounting door closer (spring-actuated) as **STANDARD**.

MAIN CHARACTERISTICS

- Die-cast Aluminum R14
- Two closing speed adjustments
- Hydraulic deceleration adjustable on opening against mechanical shocks and wind blows
- Adjustable opening angle
- Adjustable door stop
- Guaranteed minimum for 500,000 operating cycles
- Mounting in the frame lintel
- Ambidextrous









DOOR AUTOMATION - STANDARD



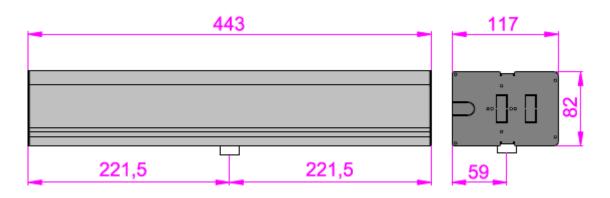


As option, it is possible to install a door automation device for all single-hinged swing doors (panel and panoramic).

MAIN CHARACTERISTICS

Utilisation	Automatic swing doors for indoor	
Certificates	(see next slide)	
Dimensions	82 x 117 x 443 mm	
Max Load	200 kg x 0.8 m	
Operation time	2 - 6 sec	
Service class	Continous operation	
Intermittence	S3 = 100%	
Internal durability test	5 million cycles	
Power supply	100-240 V 50/60 Hz	
Power	40 W	
Stand-by	8 W	
Rated load	20 Nm	
Protection class	<u>IP20</u>	
Operating temperature	-15°/+50°	
Parameters adjustment	Buttons and display	
Accessories output	12 Vcc (1 A max)	
Firmware update	USB standard	







You can find it in the price list as: Door automation for panel door with - or without view and panoramic aluminium door

DOOR AUTOMATION - CERTIFICATES



ATTESTATO DI CONFORMITA' STATEMENT OF CONFORMITY

alle prescrizioni tecniche contenute nelle seguenti Norme e/o specifiche tecniche according to the technical requirements of the following Standard and/or technical specifications

EN 16005 (2012)

che conferiscono presunzione di conformità ai requisiti di protezione stabiliti dalle Direttive CEE n. 2006/42/CE Annex I per le prove applicate.

which give compliance with the protection requirements stated by EC Directives n. 2006/42/CE Annex I for applied tests.

Identificazione del prodotto:

Product identification .

Marca: Brand:

Descrizione prodotto:

Automation for swing doors

Product description.

MACTR 141078-0

Rif. Rapporti di prova: Ref. Test reports:

Costruito da: Manufactured by:

Si richiama l'attenzione del Costruttore che il presente Certificato consente di apporre sul prodotto sopradescritto la marcatura di conformità CE e di redigere la Dichiarazione di conformità CE quando sono soddisfatte tutte le altre disposizioni della sopraccitata Direttiva e, qualora sia disciplinato da altre direttive relative ad aspetti diversi e che prevedono l'apposizione della stessa marcatura, di tutte queste altre direttive.

This certificate allows the firm to affix on the above mentioned product the CE marking and to prepare the EC Declaration of conformity when are fulfilled all other requirements of the aforementioned Directive and, where the same product is the subject of other Directives providing for the CE marking, when complies with the relevant requirements of those other Directives.



Certificate P-4113/19 (English Issue)

(valid only in association with the terms overleaf)

Holder of the certificate:

Site of Manufacture:

Type Approval Mark:

valid until

2023-12-31







Product:

automatic door drive for swing doors

Model:

Testing based on the following:

- DIN EN 16005: 2013-01
- Power operated pedestrian doorsets Safe in use DIN EN 60335-1: 2012-10
- Household and similar electrical appliances Safety Part 1: General requirements
- DIN EN 60335-2-103: 2016-05 Household and similar electrical appliances - Safety Part 2-103: Particular requirements for drives for gates, doors and windows
- DIN EN ISO 13849-1/2:2016-06 and 2013-02 Safety of machinery - Safety-related parts of control systems All standards, regulations or guidelines named in the above-mentioned basic documents must also be considered valid.

Result of testing:

The demands made in the test requirements are fulfilled by the product.

Permission is hereby given to use the Test Mark illustrated above, in accordance with the contractual terms printed overleaf.

Zella-Mehlis, 2019-06-14

TÜV Thüringen e.V. (Association for Technical Inspection)

Test Centre for Building Products

Graduate Engineer (FH) Reichelt Manager of the Test Centre



DOOR AUTOMATION - EI 60/120 <850 MM

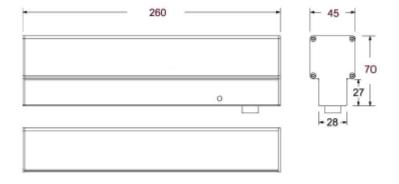


For fire-rated doors <u>El 60/120</u> with opening **below 850 mm,** a special automation device is available as option.

The device is always installed in the door's lintel.

MAIN CHARACTERISTICS	
Max Load	Up to 100 kg with max panel width 1100mm
Power Supply	24 V ac / dc
Opening time (90°)	5-10s
Dimensions	260X45 H.70 mm
Colour	Silver
Operating temperature	-20°C+50°C
Protection class	IP30







Compliant to: Electromagnetic compatibility directive 89/336/CEE; Low voltage directive 73/23/CEE



DOOR AUTOMATION - EI 60/120 <850 MM

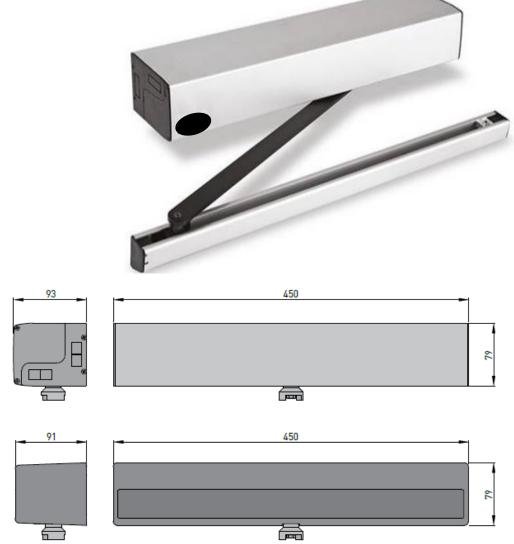
SWING DOORS

For fire-rated doors <u>El 60/120</u> with opening **above 850 mm**, a different automation device is installed as option.

The device is always installed in the door's lintel.

The <u>El 60/120</u> doors always come with the fixing holes.

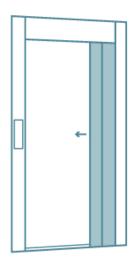
MAIN CHARACTERISTICS	}	
Max Load	110 Kg	
Power supply	24 V DC	
	230 V AC / 50-60 Hz	
Internal durability test	1 million cycles	
Opening time (90°)	3÷6 sec	
Closing time (90°)	4÷7 s	
Dimensions (H x P x L)	79x93x450	
Colour	Silver	
	-20°C / +55°C	
Operating temperature	(-10°C / +50°C with batteries)	
Open door time	0÷30 sec	
Weight	3.5 Kg	
Protection class	<u>IP30</u>	



TELESCOPIC - TYPES

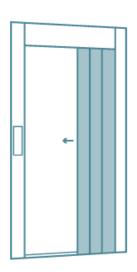


The following types of automatic telescopic doors are available:



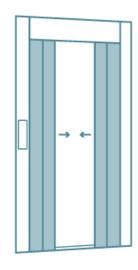
Telescopic 2 panels
T2 (side opening, right or left)
Also available as:

- Fireproof UK
- Fire-rated EN-8158 EI 120



Telescopic 3 panels
T3 (side opening, right or left)
Also available as:

• Fire-rated EN-8158 EI 120



Telescopic 4 panels C4 (central opening)

The cab automatic door mandatorily requires that all the landing doors are automatic and of the same type (i.e. if the cabin door is T2, also the landing doors must be T2).

In case of 2 or more stops, an additional mechanical safety block is required (see dedicated <u>slide</u>). The telescopic door C4 type can be installed only on the opposite side of the rails.

The maximum depth allowed to install an automatic telescopic door is:

- 1250 mm for all telescopic doors (1400x900 and 1400x1140 platforms are not available with telescopic doors)
- 1170 mm for glass telescopic doors (HL version only)



All automatic doors are compliant to the following:

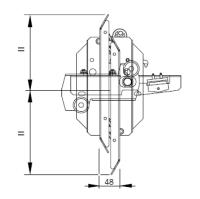
- EN 81-20
- EN 81-21
- EN 81-41
- EN 81-50
- <u>EN 81-71</u> Cat. I and II
- Protection class <u>IP 21</u>

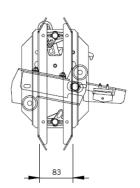
Following versions are available:

- In **Similinox** standard
- In painted standard steel Vimec 7040
- In stainless steel AISI 441 (indoor only)
- In stainless steel <u>AISI 316</u> (outdoor only)
- In glass with stainless steel frame (only HL version with maximum depth 1.170 mm)
- In painted steel special RAL



All telescopic doors have a door locking device that prevents the doors from being forced open by one or more people from inside the cabin.







TELESCOPIC - TECHNICAL DATA

Locking system



	Cabin doors	Floor doors	
Yearly opening cycles (max)	500.000	800.000	
Allowed traffic (max)	240 cycles/hour		
Width (mm) min-max	600 -1000		
Height (mm) min-max	2000-2100	2000-2200	





ELECTRONIC CARD
Motor type DC brushed with endless screw
Efficiency 56%
Consumption: Standby 2 W / Average per cycle 12 W
Gearless transmission
ELECTRONIC MODULE
Type DC 24
Adjustable parameters with PC / Console
Opening speed up to 0.4 m/s (adjustable)
Closing speed up to 0.35 m/s. Automatically adjustable according to the panel weight
GENERAL DATA
Noise level < 53 dB
Total weight Example: T2, width, free passage 800 mm, free height 2.000 mm with steel panels - 65 kg
Max Moving mass 50 kg



TELESCOPIC - SAFETY BLOCK



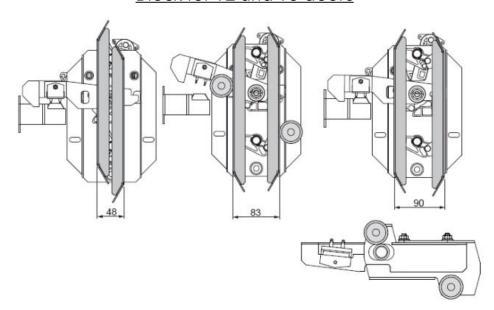




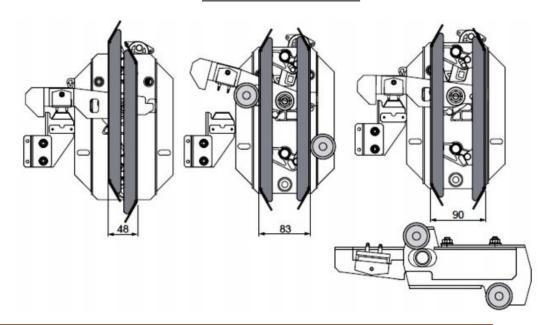
In the case of **elevators with more than 2 stops**, there is a safety device to lock the cabin door panels when the machine has not landed on the floor. In case of double access to the cabin, 2 locking devices will be provided, one for each cabin door. This device ensures against falling into the shaft and shearing effect.

The cabin door can only be unlocked from the outside after unlocking the landing door and releasing a special safety steel cable.

Block for T2 and T3 doors



Block for C4 doors



You can find it in the pricelist as: Mechanical safety block for cabin doors (compulsory for lifts with more than 2 stops)



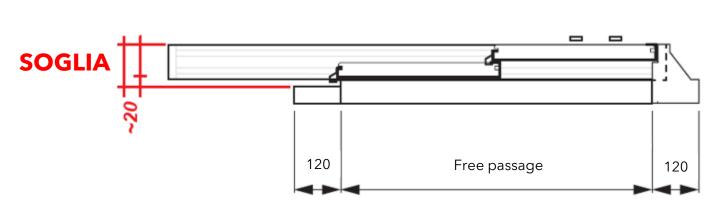
TELESCOPIC - THRESHOLD





The threshold, made of aluminium, is given by the total size of the automatic doors (floor and cabin) + a space of 30 mm standard or 35 mm in case of cabin door block. A further 20 mm (specified in the table below) is added to these dimensions in case of fire doors.

	Cabin door package	Floor door package	THRESHOLD	TOTAL w/o block (incl. 5 mm tolerance)	TOTAL w/block	Notes
Т2	70	75	75	180	185	
T2 - E 120 - fireproof	70	75	75+20	200	205	
T2 - El 120	70	90	90+20	215	220	With heated thresholds
Т3	90	90	90	215	220	+20 mm
T3 - EI 120	90	135	135+20	280	285	
C4	70	90	90	195	200	







INFRARED BARRIER

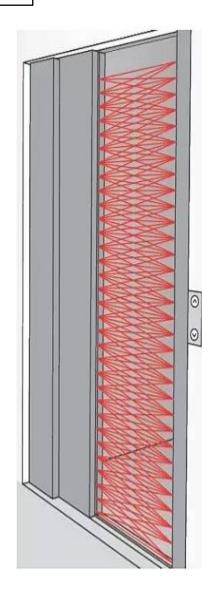




As standard on all elevators, a **full-height infrared barrier** is provided capable of detecting the possible presence of objects, even small ones, and stopping the closing movement of the doors and transmitting the re-opening order. The infrared barrier, installed between the landing and cabin doors in case of automatic doors, is certified according to the <u>EN 81-20</u> lift standard.

Dimensions	10 mm x 23.5 mm x 2000 mm
Diodes	40
Diodes distance	47.5 mm
Detection area height	20 mm - 1872 mm
Detection area width	0 mm - 4000 mm
Rays number	194 (d>400 mm) 118 (d<400 mm)
Response time	69 m/sec
Operating temperature	-20°C - +65°C







COATING AND COLOURS



The standard door colours are:

- VIMEC 7040 for all swing doors
- **Similinox** for all telescopic doors
- RAL 7038 for all fire-rated/fireproof swing doors



Special RALs are available on request.

It is not possible to have cabin doors and floor doors with different colours.

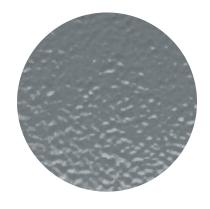
Door frames are supplied in the same colour as the doors.

All painted **floor doors**, both indoor and outdoor, have an **orange-peeled semi-glossed finish** (Gloss 70).

Smooth finish is standard for all Similinox telescopic doors and is also available for aluminum swing doors and other telescopic floor doors - anyway, this finish is not recommended since it is easily scratchable.

Additional treatments are available on request as specialty.

See also summary <u>Finishes</u>.



Orange-peel



FLOOR PUSH-BUTTON

DOORS

The standard floor push-button is made of thermoplastic material with 3 mm thickness.

The single button is squared, 60x60 (active part 50x50) backlit in green colour (elevator is free) or red (elevator is occupied).

The <u>i-Button</u> contact is always installed and visible even if not activated. Landing call is always «single-touch» type.

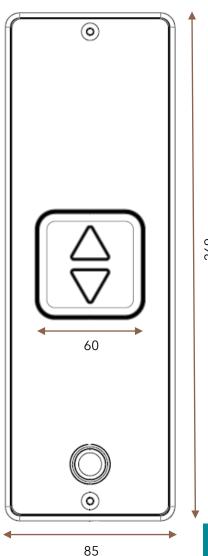
The floor push-button is the same as the cab one (cab push-button).

The **LCD display** is available as **option** and has the following characteristics:

Visible area	50 x 54 mm	
Display	Shockproof and scratchproof transparent polycarbonate	
Colours	White lighting on a blue background	
Power supply	12/24Vdc +/- 10%	









FLOOR PUSH-BUTTON - COLLECTIVE CALL

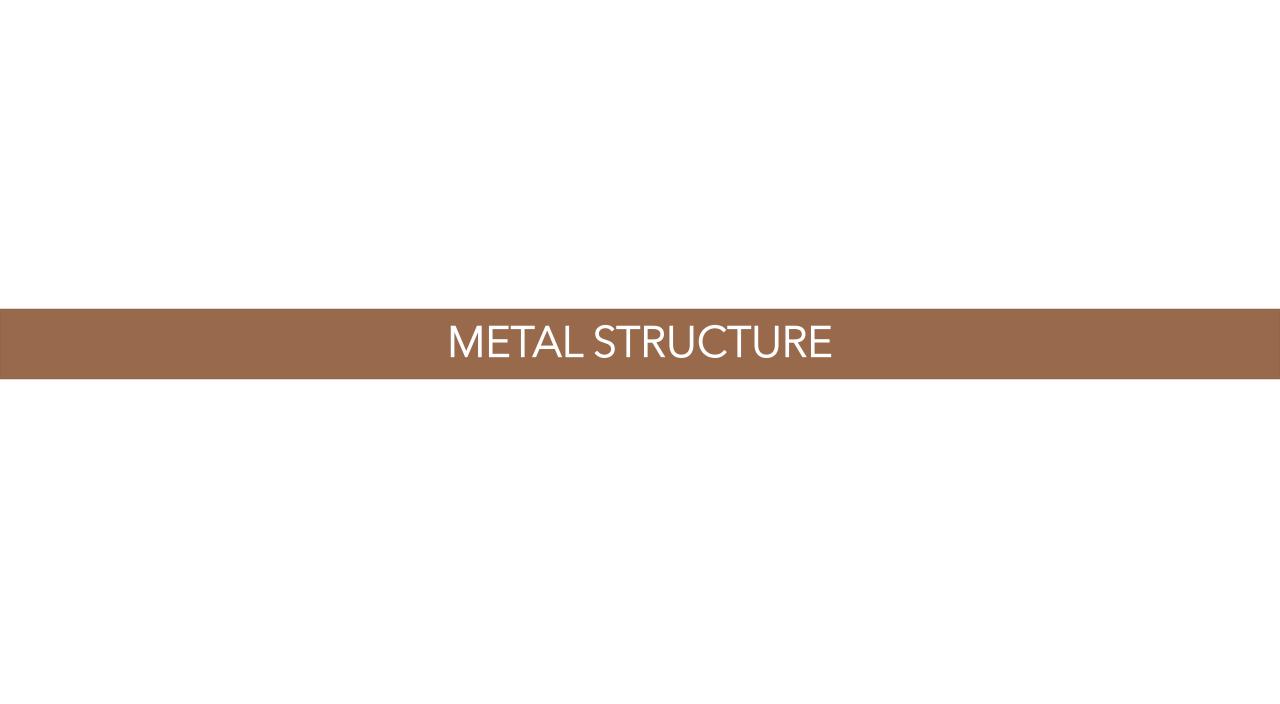


Collective call functionality is available as option:

The floor selections in the cabin are instantly recorded and executed in the order in which the buttons are pressed - for example, if I am on floor 1 and press buttons 0, 2, 3 in this order, the lift will first descend to floor 0 and then ascend to floor 2 and then continue to floor 3.

Floor calls, as for the cabin, are instantly recorded and executed in the order in which the buttons are pressed, regardless of which floor the users are on. In other words, the machine serves whoever presses the call button first.





STRUCTURE - OVERVIEW

Vimec metal structure acts as travel shaft both indoor and outdoor installations.

The structure is made of 4 pillars connected to each other by crossbeams forming in turn intermediate rings with fixed pitch and acts as a cage for the lift, thus protecting the cabin in the ascent and descent trajectory.

Each structure is designed to be fixed in the pit and/or in the headroom and/or laterally to one or more walls of the building.

The materials used are:

- Steel for the pillars and crossbeams of the structure
- Steel and aluminum for the claddings' frames
- Glass for the claddings

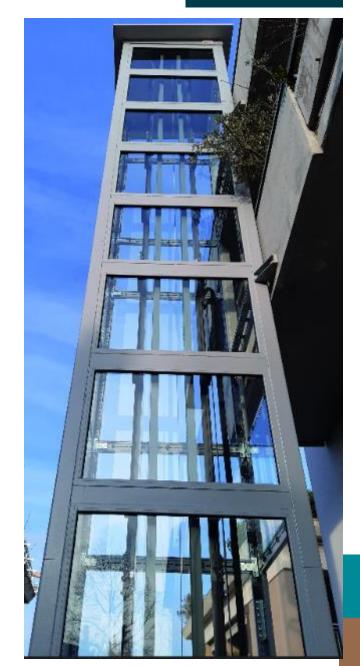
The rail side is provided with painted blind panels as standard and with glass panels upon request.

It is possible to choose "mixed" claddings in the same structure (i.e., combination of transparent and smoked glass).

It is also possible to supply the structure without claddings - these will then be chosen at will by the customer who must give Vimec's Technical Dept all technical details about the cladding's materials. This is necessary to obtain the CE certificate.

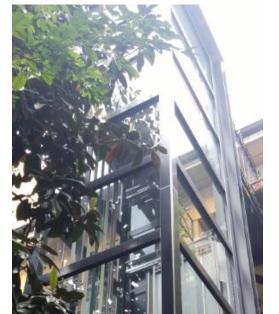


Vimec produces each structure according to the design of a qualified and registered engineer and in compliance with EN 1090, the European standard that specifies the requirements to be met by companies that manufacture and design structural steel components.



STRUCTURE - CLADDING TYPES

← Transparent glass









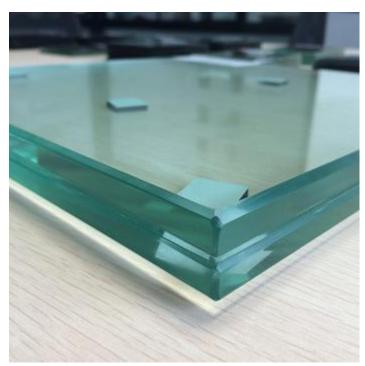
Smoke-grey glass



Steel



CLADDING - GLASS



Glass claddings are available in the following versions:

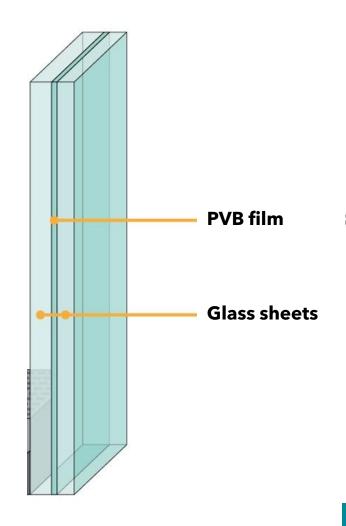
- > Transparent
- > Smoked
- Smoke-grey
- ➤ Milk-white
- ➤ Mirrored (<u>Stopsol</u>)

The glass used for claddings, as well as for the doors, glass insert and protections, are stratified with a total thickness of

5+5+0,76 mm.

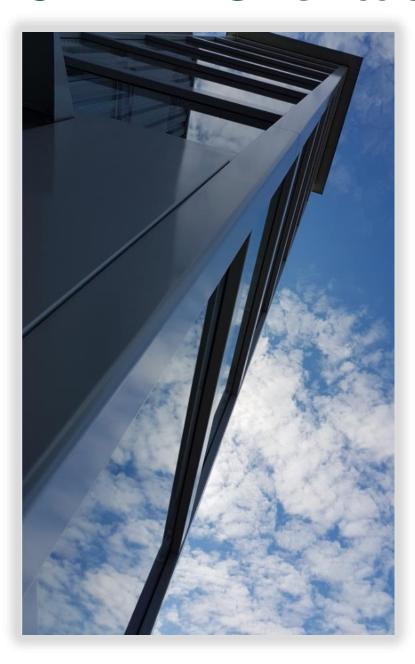


All glass surfaces have a mechanical strength such that, when a force of 300 N, being evenly distributed over an area of 5 cm² in round or square section, is applied, they resist without breakage, permanent deformation and/or elastic deformation greater than 15 mm.





CLADDING - GLASS CERTIFICATE



LAMINATED SAFETY GLASS 55.1

thickness 10.4 mm - weight 26 kg/m²



It is produced according to UNI EN 14449 with level 3
Intended to be used in buldings and construction works

intended to be used in buildings	and co	пѕичено	n works
CARATTERISTICHE - CH	IARA	CTERIST	ΓICS
For applications correlated to security in the event of fir Fire resistance EN 13501-2 EN 357 Reaction to fire EN 13501-1 External fire EN 13501-5	e:		NPD NPD NPD
Safety use mechanical resistance Resistance to sudden temperature changes and temperatur			30 °K
Resistance to wind, snow, permanent and imposed load lo For other uses susceptible to present a risk of "s subject to the corresponding standards:		-	10.4 mm
Impact resistance of the pendulum Body	EN	12600	2(B)2
Burglar resistance	EN	356	NPD
Bullet resistance For other uses related to the reduction of noise:	EN	1063	NPD
Airborne sound insulation estimated by direct en balancing with other tests of similar compositions accordance with EN 717 or EN 140 derived from RW = weighted sound reduction index C = period of adjustment of the spectrum of pink noise, I Ctr = period of adjustment of the noise spectrum normals for uses related to energy saving:	made UNI 1:	in 2758 hed sounds	35 +/- 1 dB -1 dB -3 dB
Ug thermal properties according to EN 673 (emi luminous characteristics according to EN 410 to			5.6 W/(m ² K)
light transmission			87 %
light transmission External light reflection Internal light reflection			8 % 8 %
Energy Properties according to EN 410 tolerance	+/- 3 poi	nt	68 %
Direct Energy Transmission	•		26 %
Energy absorption glazing		74 %	
Solar factor = g = SHGC Ultraviolet transmission			< 1 %

NPD: This feature is not declared

12/02/2020

STRUCTURE - OUTDOOR ROOF

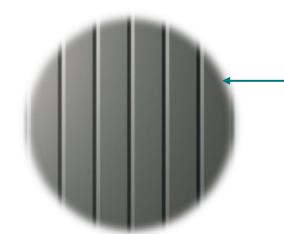
STRUCTURE

For outdoor installations, it is mandatory to install a steel **roof**, available also in stainless steel (upon request).

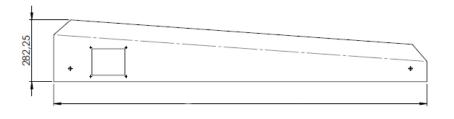
The roof consists of a load-bearing structure and an insulated roof composed as follows:

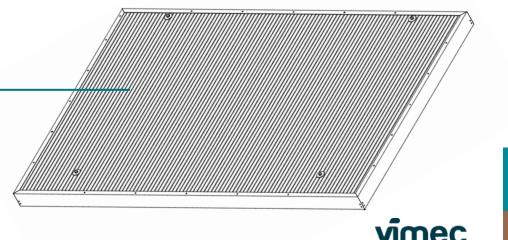
- 2 galvanised S235JR steel support laminated panels, 0.4 mm thick and prepainted with slatted surface
- 1 layer placed between the two panels in rigid polyurethane foam (PUR) with high insulating power with the following characteristics:
 - > Thickness 35 mm
 - ➤ Reference initial thermal conductivity: 0.020 W/mK
 - > Total density 40 kg/mc ±10%.
 - ➤ Compressive strength: >100 kPa
 - ➤ Dimensional stability -25/+80° C <1%
 - > 100 mm steel sheet profiles











STRUCTURE - OTHER COVERINGS

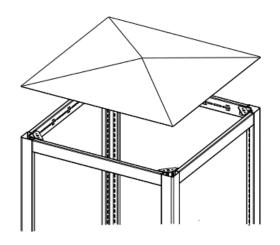


The following are available as option:

Indoor structure roof (OPTION)

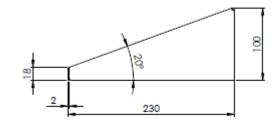
Made of 2 mm thick steel sheet with diamond pattern in the same finishes as the structure.





Canopy for door, outdoor only (OPTION)

Made of 2 mm thick steel sheet with the following dimensions:







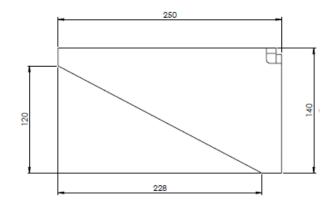
STRUCTURE

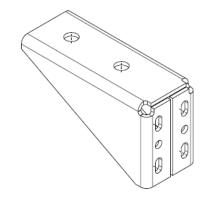
STRUCTURE - BRACKETS AND SUPPORTS



All structures are supplied with standard wall brackets made of S235JR steel with the same finishes as the structure (same colour and treatment).

Normally, one attachment is positioned every 3 metres in height and on both sides of the structure.





In the case of structures where no side rests on the wall, it is possible to install brackets of variable length as shown in the image.

It will be the responsibility of the staff taking care of the installation to evaluate the most suitable type of support for each installation.



STRUCTURE - PROTECTIONS



In case it is not possible to fix the structure in the headroom ("free headroom", last floor is free), steel **crossbars** are installed - these are installed inside each cladding and provide further stiffening to the structure, as there are no other brackets or supports mounted in the headroom.

You can find it in the price list as: Extra price for "free" headroom

It is also possible to "clad" one or more sides of an installation with **protections**. This is a special solution in the case of one or more free sides in the elevator shaft.



Protections are installed in indoor only to ensure against shearing effect while the machine is in operation.

You can find it in the price list as: Aluminium protection shaft



STRUCTURE - SURFACE TREATMENTS



All structures are supplied as standard in **Vimec 7040** colour and in **orange-peeled** finish, which covers all elements of the structure, including brackets, roofs, frames and doors.

The elements just listed (**doors excluded**) are also available in a smooth finish NOT RECOMMENDED because they are easily scratchable (especially in outdoor installations). See also <u>Finishes</u> summary table.

In accordance with the European standard UNI EN ISO 12944-1:2018 "Paints and varnishes - Corrosion protection of steel structures by protective paint systems", Vimec provides for **3 different types of treatment** depending on whether it is an internal or external structure and on the environmental conditions of the place of installation. Specifically, the treatment to be carried out is evaluated according to the UNI EN ISO 12944 standard, which classifies the environments in different categories according to their corrosivity class:

Corrosivity	Examples of typical enviro	ents in a temperate climate		
cat.	Outdoor environments	Indoor environments		
C1 Very Low	-	Heated buildings with clean atmosphere, i.e. offices, shops, schools, hotels etc.		
C2 Low	Environments with low level of pollution, mostly rural areas	Unheated buildings where condensation may occur, i.e. Depots, sport halls etc.		
C3 Medium	Urban and industrial environments, moderate sulphur dioxide pollution. Coastal areas with low salinity	Production rooms with high humidity and some air pollution, i.e. food processing plants, laundries, breweries, dairies etc.		
C4 High	Industrial and coastal areas with moderate salinity	Chemical plants, swimming pools, coastal ship and boat yards		
C5 Very High	Industrial areas with high humidity and aggressive atmosphere, coastal and offshore areas with high salinity	Buildings or areas with almost permanent condensation and high pollution		



STRUCTURE - SURFACE TREATMENTS



1. Standard treatment for INDOOR INSTALLATION - Powder painting

For indoor structures, normally subject to less corrosion, installation in category **C1** environments is considered. The treatment in this case includes polyester **powder painting** - it is a protective surface treatment that guarantees eco-compatibility and excellent aesthetic finish for all parts of the structure installed indoors. After application of the paint, the pieces are baked in an oven at about 160°/180° for about 20 minutes.

Painting's characteristics:

Thickness: 150-200 micron with orange-peel finish, 60-100 micron with smooth finish

Resistance in saline mist: max penetration max 2 mm after 300 hours

Adhesion test: compliant to ISO 2409, no detachment

Humidistat: 500 hours

2. Standard treatment for OUTDOOR INSTALLATION - Cataphoresis + Powder painting

For all outdoor structures, on the other hand, Vimec has chosen as standard to consider installation in highly corrosive **C4** environments and to subject all the structures to a preliminary **cataphoresis** process (uniform deposit of black epoxy paint on the surface of the element), in addition to powder coating. Cataphoresis is the deposit of a black film of paint capable of giving the metal elements considerable resistance to corrosion, protecting them from atmospheric agents and allowing better adhesion of powder coatings. The application technique is carried out by immersion in a tank plus electrodeposition.

Cataphoretic film characteristics:

Thickness: 18-24 micron

Resistance in saline mist: ASTM b 117 = 500 hours average Direct and reverse impact resistance compliant to ASTM d 2794

UV resistance: discrete (chalking) Pencil hardness 5H (ASTM d 3363) Adhesion: 98/100% to grid (grade 0)

Acid, alkali and hydrocarbon resistance: good



STRUCTURE

STRUCTURE - SURFACE TREATMENTS

3. Treatment for OUTDOOR INSTALLATION in AGGRESSIVE ENVIRONMENTS - Cataphoresis + Primer + Powder painting

In case of installation in particularly aggressive outdoor areas, Vimec adds a third type of surface treatment suitable for **C5** category areas - the new treatment also includes the application of a specific varnish **primer** in addition to cataphoresis and standard powder coating.

The adoption of the 3 types of surface treatments just described, as well as improving the quality of the structures in terms of corrosion resistance, is aimed at certifying their **durability up to 10 years** after installation. Durability means, in compliance with the UNI EN ISO 12944 standard already mentioned, the period, expressed in years, that goes from the installation of the system up to the first total repainting intervention, provided that the system is subjected to regular maintenance as indicated in the following table:

Vimec installations	Treatment	Environment class	Maintenance frequency for durability up to 10 years
Indoor	Powder painting	C1	Every 5 years
Outdoor standard	Cataphoresis + Powder painting	C4	Every 2 years
Outdoor aggressive	Cataphoresis + Primer + Powder painting	C5	Every 2 years



STRUCTURE - FOUNDATION AND BASE LOAD

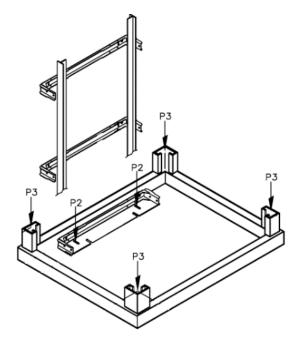
Before installing a metal structure, it is necessary to analyse the requirements of each project in terms of foundation and load distribution. The foundation is a monolithic reinforced concrete body, usually 300 or 400 mm thick, whose function is to support the weight of the metal structure and discharge it to the ground. The precise evaluation of the thickness or of a different type of foundation (i.e., addition of reinforcement) is entrusted to the professional in charge of the project.



Vimec recommends that pit floor strength has to be increased to at least **5000 N/m2** where there is an accessible space beneath the pit (i.e. basement), in compliance with lift standard <u>UNI EN 81-20.</u> (par. 5.2.5.4).

The following chart contains some indications about base loads with different platforms and considering the following features:

- All sides with glass cladding
- Max load 400 kg
- Travel 8290 mm
- Pit 140 mm
- 1 cabin door



Platform (L x P)	Structure (L x P)	Load acting on machine group (daN)	Load acting on the rails (daN) P2	Load acting under each pillar (daN) P3
900 x 800	1400 x 1300		758	840
900 x 900	1400 x 1400	165	768	871
1000 x 900	1500 x 1400		765	871
1000 x 1000	1500 x 1500		787	932
900 x 1400	1400 x 1900		821	1025
1100 x 1400	1600 x 1900		843	1086
1250 x 800	1750 x 1300		784	948
1250 x 1000	1750 x 1500		809	1009
1400 x 900	1900 x 1400		809	1025
1400 x 1140	1900 x 1640		841	1098

STRUCTURE - EUROCODE 3 MODULE



PRELIMINARY INFORMATION FORM ACCORDING TO EC

THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED TO VIMEC

Vimec's job no.

SITE INFORMATION

- METRES ABOVE SEE LEVEL m	
- STEEL FRAMED STRUCTURE POSITION Inside the building Outside the building	
- TERRAIN CATEGORY (see EN 1991-1-4:2005 Annex A): Terrain category 0 Terrain category II Terrain category III Terrain category IV Note: terrain category IV will be assumed, if the customer documents.	esn't choose an option.
- WIND LOAD (see EN 1991-1-4:2005 Table 5.1) Fundamental value of the basic wind velocity vb.gn Peak velocity pressure qb daN/m² Note: vb.g (or qp) will be assumed by the designer, if the custor	
- EXPOSURE COEFFICIENT Ce (see EN 1991-1-3:2003 Table 0.8 1 1.2 Note: Ce will be assumed =1, if the customer doesn't choose	
- SNOW LOAD (see EN 1991-1-3:2003) Climatic Regions and zone number (Z) (see snow load on the ground (sk) daN/m² (see par. 5 Note: sk will be assumed by the designer, if the customer doe	2)
CUSTOMER SERVICE TECHNICIAN Name : mail address CALCULATION REPORT	
☐ PDF calculation report mail address	□ paper calculation report streetn° of copies
vimec	DATA DI EMISSIONEFIRMA

It is possible to request the calculation report certifying the conformity of the structure to EUROCODE 3 (1993) using a dedicated form. The calculation report, drawn up internally by Vimec's Technical Dept, requires the following information:

- > CAT. 0 Sea or coastal area exposed to the open sea
- > CAT. I Lakes or flat and horizontal area with negligible vegetation and without obstacles
- CAT. II Area with low vegetation such as grass and isolated obstacles (trees, buildings) with separations of at least 20 obstacle heights
- CAT. III Area with regular cover of vegetation or buildings or with isolated obstacles with separations of maximum 20 obstacle heights (such as villages, suburban terrain, permanent forest)
- > CAT. IV Area in which at least 15% of the surface is covered with buildings and their average height exceeds 15m (this category is considered in case of missing information)

Average wind load in the area, measured according to EN 1991-1-4:2005

Exposure coefficient

- > 0,8 Flat topography
- > 1 Normal topography
- > 1,2 Sheltered topography

Snow load according to EN 1991-1-3:2003

- > Climatic region (i.e., alpine, Mediterranean etc.) and zone number as in the standard
- > Snow load on the ground

You can find it in the price list as: Calculations and anti-seismic report according Eurocode 3



TRACTION

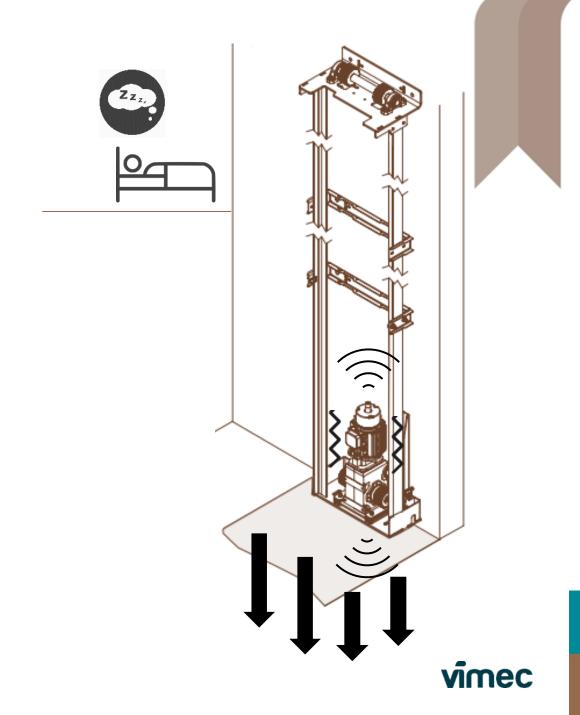
TRACTION - MOTOR SALES MEMO

Motor placed at the bottom, Vimec exclusive technology

- ✓ Vibrations discharged to the ground
 - ✓ Low noise level
 - ✓ Ease of installation

No counterweight

- ✓ Optimized space management
 - ✓ Ease of installation



TRACTION - GUIDES

The guides are made with T70x65x9 profiles machined and calibrated: the same normally used for lifts.

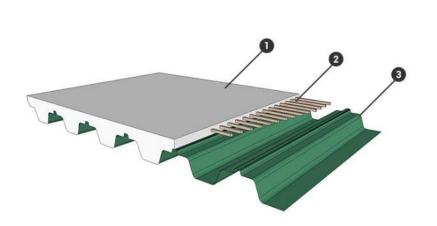
They are supplied in modular sections with a maximum length of 2.5 metres in order to facilitate movement on site.

The fixing of the guides to the wall or to the metal structure is made by means of tie brackets and requires a maximum pitch of 1300 mm.

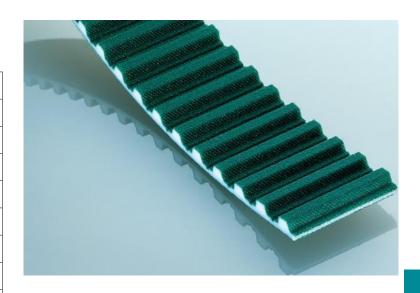
The treatments of the guides follow the same logic as for the metal structure (see dedicated <u>slide</u>).

The distance between the guides is always 700 mm, regardless of the cabin.

The traction belts have 22 teeth engaged in each pulley and are made of 36 polyurethane resin threads (transparent on the back and toothed on the other side).



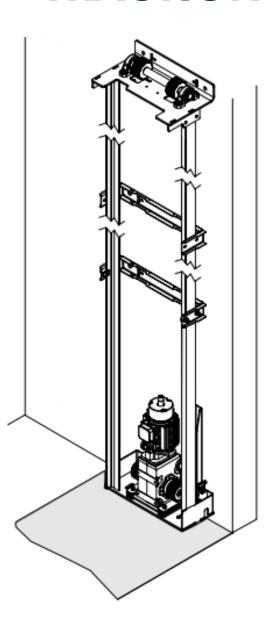
MAIN CHARACTERISTICS		
Width	60 mm	
Thickness	5,6 mm	
Туре	TPU	
Hardness	92 Sh.A	
Operating temperature	-5°/+70°	
Eligible workload	16743 N	
Breaking load	>/= 61250 N	
Coating	Poliammide (T 12)	





TRACTION

TRACTION - MOTOR



E10 uses **MRL** (Machine Room Less) technology and a **low consumption electric motor**. The MRL elevators differ from the traditional ones for the total absence of machine room, usually placed in the headroom. The elevator is in fact located entirely in the shaft. In addition, the engine of E10, is located **at the bottom** of the shaft making it possible to discharge all the vibrations on the ground and ensuring a very low noise level. All this for a minimum technical encumbrance (machine pack) of **310 mm**.

MAIN CHARACTERISTICS:

Type: Three-phase asynchronous electric with gearbox

Motor power: 1,5 kW / 3 kW (HL and LT versions)

Line voltage: 230V-mono AC - 50Hz

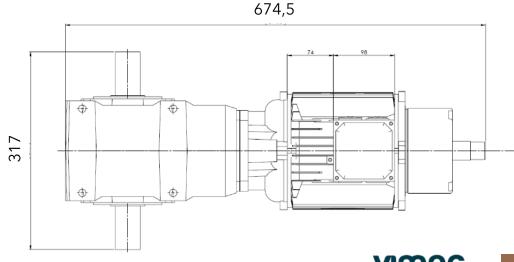
Power supply: $230V \pm 5\%$

• Auxiliary power supply: 24V DC



Full load consumption going upward 2kW

This technical solution is able to guarantee the best possible combination of space, noise, motor efficiency and cost.





TRACTION - MOTOR CERTIFICATE

DICHIARAZIONE DI CONFORMITÀ DECLARATION OF CONFORMITY

La Ditta / The Company:

dichiara sotto la propria responsabilità che i motori elettrici asincroni trifase declares under its own responsibility that the three-phase induction motors

serie / series:

ed i motori asincroni trifase autofrenanti and the three-phase induction brakemotors

serie / series:

soddisfano i requisiti delle Direttive: are in conformity with the requirements of the Directives:

Directive 2006/95/EC Directive 2004/108/EC

La conformità ai requisiti delle Direttive è comprovato dal rispetto delle seguenti Norme:

The conformity with the of Directives requirements is proved by compliance with the following Standards:

EN 60034-1:2010 EN 61000-6-2: 2005 EN 61000-6-4: 2007

I motori sono destinati ad essere montati nelle macchine. La messa in servizio è vietata finché non sia stato verificato che l'installazione finale non soddisfa i requisiti della Direttiva Macchine 2006/42/CE. The motors are intended for installation in machines. Commissioning is prohibited until such time as the end product complies with the provisions of the Machine Directive 2006/42/EC.

Dovranno essere osservate le istruzioni di sicurezza riportate nella documentazione di prodotto e le prescrizioni della Norma EN 60204-1: 2006.

The safety Instructions of the product documentation and EN 60204-1:2006 requirements must be met.





NOISE LEVEL - DB

In case a noise level cerification is required, Vimec can issue a self-certification with the following values in dB registered with a phonometer, at a speed of 0.15 m/s:

1) On board with 2 persons

Ascent phase: 53.2 - 55.6 Decibel

Descent phase: 52.4-54.8 Decibel

1) Automatic door opening at front door 42.8 Decibel

SAFETY

SAFETY

SAFETY - OVERVIEW



As partly already covered in previous slides, E10 EcoVimec integrates many devices and features that place it at the top of the competition in terms of safety.

The safety system of E10, in fact, has been designed following the concept of **redundancy**, the duplication of actions and/or devices to perform the same function, in this specific case the blocking of the entire machine or components of it in case of emergency or breakdown.

Below, the main safety features of E10 are listed:

- <u>Emergency stop button</u> in the cabin or behind the COP (only with telescopic doors)
- <u>Door safety lock</u> and dedicated <u>locks</u>
- Safety lock for automatic doors in the cabin
- Infrared barrier
- **Safety contacts** on the **COP** and in the **roof** in case one of these elements are opened, an electrical contact interrupts the machine power supply
- Magnetic sensors positioned in the arch to ensure the correct stop positioning at the floors
- Emergency stop in the pit the device is the same as the button in the cabin or behind the COP
- Microswitches in the headroom and in the pit that stop the machine if it goes beyond the last floor
- Safety in the pit and in the headroom (see dedicated slide)
- Overload Control a dedicated sensor detects if the load is higher than allowed by interrupting machine operation
- Over Speed Governor (O.S.G.) and safety gear (see dedicated <u>slide</u>)
- Safety inverter (see dedicated <u>slide</u>)



SAFETY – PIT AND HEADROOM



According to the standard <u>EN 81-41</u>, «if a clear space of 500 mm minimum is not available under the platform when at its lowest position, a manually positioned mechanical blocking device shall be provided to enable the platform to be held in a raised position and to create a free distance of at least 500 mm between the floor of the working area and the lowest parts of the platform".

In the E10 **pit**, in fact, in addition to the red stop button, there is a **700 mm steel strut** (placed between the floor of the work area and the lower parts of the platform) that is raised before entering the pit and is equipped with an electrical safety contact that detects the correct positioning of the strut and disables all machine controls. This system guarantees the stop of the machine travelling downwards at nominal speed with the maximum working load.

Similarly, there is a **600 mm steel strut** in the **headroom**, which is raised before access in the header for maintenance, which is also equipped with a safety contact.



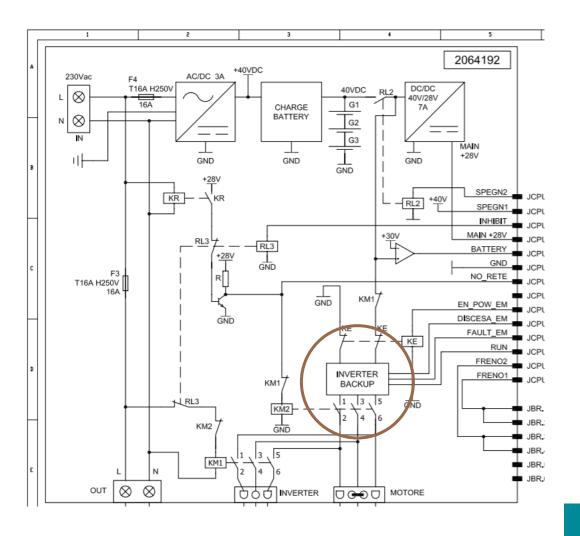
SAFETY - BACKUP INVERTER



In the event of a power failure (blackout) or failure of the main inverter, E10 has an **additional backup inverter** that intervenes allowing the machine to descend to a lower floor and disembark any passengers safely. **Vimec** is the only manufacturer of electric lifts to integrate this safety solution.

In the case described above, the machine **stops progressively**, the lights in the cabin are dimmed and only the buttons of the lower floors remain active - the only possible manoeuvre is then to press one of the backlit buttons to reach the lower floors. On request, it is possible to set a predefined floor to disembark in case of emergency.

This operation takes place at a reduced speed and when the floor is reached the door opens regularly. The cabin display will show the abbreviation EM.







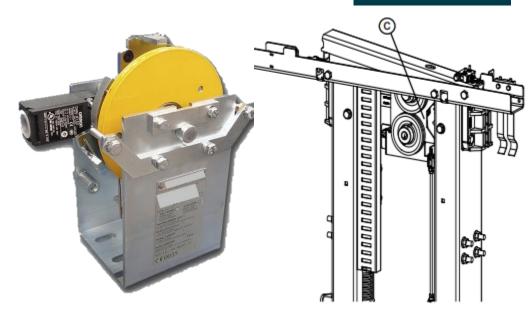
If the machine exceeds its maximum allowed speed, while going upwards or downwards, or in case of breakage/loosening of the traction belts, a safety device called **Over Speed Governor (fig. c)** is triggered which acts by blocking the machine. The governor, placed in the arch, interrupts the power supply of the elevator and simultaneously causes an additional mechanical **safety gear (fig. a)** to come into operation. The gear is composed of two blocks placed on each guide and has the following main characteristics:

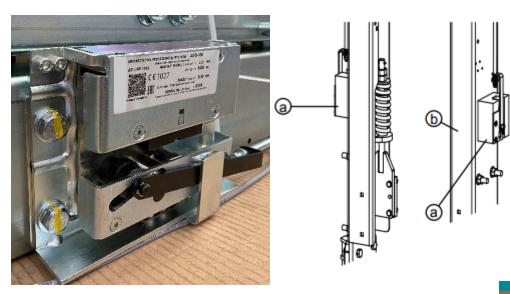
- Progressivity it stops the cabin <u>avoiding sudden overhangs and braking</u>
- *Unidirectionality* it is activated only when going downwards
 The combined action of these two devices makes it possible to stop and hold the cabin or the balancing mass on the guides.

Vimec's technical staff, during installation and testing, is able to test the operation of the devices from outside using a special test device.

In case of intervention of the safety gear, the intervention of specialised VIMEC personnel is required to unlock the machine.









SAFETY - O.S.G. AND SAFETY GEAR



ATISAE

CERTIFICADO DE EXAMEN U.E. DE TIPO

EU TYPE-EXAMINATION CERTIFICATE

Según el anexo IV parte A de la Directiva 2014/33/UE / According to annex IV part A of Directive 2014/33/EU

Número de certificado. / Certificate number

Organismo Notificado. Notified Body

ATI/LV/008

rev: 2

TÜV SÜD ATISAE. S.A.U

Avda. de los Artesanos, 20 E 28760 Tres Cantos MADRID (ESPAÑA) Nº de identificación / ID number 0053.

Clase. Tipo. Product. Type Modelo / Model

Fabricante. Manufacturer Limitador de velocidad (LV)

Overspeed governor

Propietario del certificado.

Certificate Holder

Fecha de presentación. Date of submission

Fecha del examen de tipo. Date of type examination.

Laboratorio de ensayo. Test laboratory

Informe de ensayo

Test report

Directiva / Directive.

Norma de referencia. Standard of reference

Statement:

Informe de ATISAE. / ATISAE report MD DEU 161258.002 (20.04.2016) MD DEU 132958.002 (12.07.2013)

14/07/2016

29/07/2016

(véase en el anexo técnico sección 2.14). (Please refer to technical annex section 2.14)

(véase en el anexo técnico sección 2.14). (Please refer to technical annex section 2.14)

Directiva 2014/33/UE de 26 de febrero de 2014 Directive 2014/33/EU of 26 February 2014

EN 81-1:1998+A3:2009; EN 81-2:1998+A3:2009 EN 81-20:2014; EN 81-50:2014;

MD DEU 162727 (17.06.2016) MD DEU 144690 (19.01.2015) MD DEU 120011 (02.04.2012)

Indefinido / (véase en el anexo técnico sección 2.16).

Plazo de validez / Expiry date Indefinite / (Please refer to technical annex section 2.16)

Declaración: El componente de seguridad permite al ascensor sobre el que se instale satisfacer los Requisitos de Seguridad y Salud de la citada Directiva usándose dentro del alcance que queda establecido en el anexo técnico de este certificado, así como con las condiciones de instalación indicadas.

The safety component allows the lift on which it is installed to satisfy the health and safety requirements of the Lifts Directive when it is used within the scope, as well as under the installation conditions that are set up in the technical annex to this certificate.

ATISAE

José Manuel Flórez González Director Técnico

Este certificado consta de esta portada, un anexo técnico de 5 hojas y 1 plano / documento. Su reproducción carece de validez si no se realiza totalmente. This certificate consists of this main page, a technical annex with 5 pages and 1 drawing / document, it shall be reproduced with all its pages to be considered valid.

TÜV SÜD ATISAE S.A.U.

Avda. de los Artesanos, 20. E28760 Tres Cantos MADRID Tel: 91 806 17 20



TELEMONITORING



All E10s are equipped with an integrated **telemonitoring** system (a retrofit kit is available for already installed units).

The telemonitoring device is connected to the Cloud via a GSM module - from the Cloud our Service department will be able to access a range of information remotely in order to optimise costs and repair time for the lift.

By accessing the Cloud, via any mobile device or computer, our service team is able to:

- Monitor the performance of the lift 24 hours a day
- Send alarm alerts via e-mail
- Send alarms via SMS
- Set customised working parameters
- Access alarm history
- Obtain data about working hours
- Remote control the lift

Telemonitoring can make the Service department more efficient. The Service department will be able to optimise trips by not requiring an on-site visit to analyse the problem.



PACKAGING

PACKAGING

Standard packaging mode for E10 Eco Vimec are:

For masonry shaft installation:

• One OSB wooden box containing the whole machine up to 4 floors/doors - motor, guides, walls, floor, swing doors.



In case of machine with swing doors up to 4 floors, it is the **only necessary box.**

Cardboard boxes for automatic doors (if present)

For metal structure installation:

- One OSB wooden box containing the whole machine (as for masonry shaft installations)
- One or more OSB boxes containing the metal structure pillars
- One or more OSB boxes containing the crossbeams and the cladding frames od the metal structure
- Wooden OSB boxes containing glass claddings (if present)
- Cardboard boxes for automatic doors (if present)





PACKAGING

PACKAGING

We introduced some news in the packaging that represent a real added value for the assembler and the customer:



We reduced plastic to a minimum inside the wooden box of the machine by eliminating bubble wrap and other plastic cases. The packaging materials come from recycled sources and/or are in turn recyclable. Our short-term objective is to completely eliminate plastic.

- ✓ All the components inside the box are placed in assembly order (Last In First Out) allowing

 - Reduced assembly time (you don't have to «look for» components anymore)
 - Improved protection by reducing movements that can cause scratches and breakages
- ✓ The wooden box provides for the front side to be fixed by means of easily "unscrewable" and screw-on screws in this way the box can be closed at the end of the day and serve as a site warehouse.
- ✓ All wires and components are pre-assembled as kits to grant maximum ease of assembly operations.



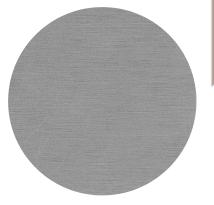




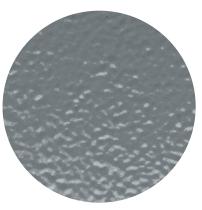
FINISHES – SALES MEMO

STANDARD finishes OVERVIEW of internal/external E10 parts

	Туре	Material	Surface	
FLOOR	-	Rubber	Anti-slip, with stamps	
INTERNAL WALLS	With COP	Coated steel	Grey	
	Others	Coated steel	Grey	
SWING DOORS (Frames included)	Panel	Acciaio verniciato	Semi-glossy orange-peel	
	Aluminum	Aluminum		
	EI 60/120	Painted steel		
	Fireproof UK	Painted steel		
TELSCOPIC DOORS (Frames included)	Cabin	Coated steel	Similinox	
	Floor	Coated steel	Similinox	
METAL STRUCTURE	PILLARS, CROSSBEAMS, BRACKETS, ROOFS	Steel	Semi-glossy orange-peel	
	FRAMES	Aluminum		



Similinox



Semi-glossy orangepeel



FINISHES - SALES MEMO

OPTIONAL finishes OVERVIEW of internal/external E10 parts

	Туре	Material	Surface	
FLOOR	-	PVC	Safestep	
INTERNAL WALLS		Stainless steel or glass	Polished linen, Brushed	
SWING DOORS (Frames included)	Panel	Painted steel		
	Aluminum	Aluminum		
	EI 60/120	Painted steel		
	Fireproof UK	Painted steel	Alternative surface finish	
TELSCOPIC DOORS	Cabin	Painted steel	upon request	
(Frames included)				
METAL STRUCTURE	PILLARS, CROSSBEAMS, BRACKETS, ROOFS	Steel		
	FRAMES	Aluminum		



Polished Linen



Brushed stainless steel



COLOURS - SALES MEMO

STANDARD colours **OVERVIEW** of internal/external parts of E10

	Туре	Colour
FLOOR	-	Grey
INTERNAL WALLS	-	Grey
	Panel	7040
SWING DOORS (Frames included)	Aluminum	7040
	EI 60/120	7038
	Fireproof UK	7038
TELSCOPIC DOORS Cabin	Cabin	Grey
(Frames included)	Floor	Grey
METAL STRUCTURE	PILLARS, CROSSBEAMS, BRACKETS, ROOFS	7040
	FRAMES	7040



For all components, it is possible to choose an alternative RAL colour (except floorings).



- AISI 316 and 441 Stainless-steel STAINLESS STEEL classified according to the AISI notation (American Iron and Steel Institute). AISI 316 steel, in addition to Chromium (18%) and Nickel (8%) contained in the "classic" stainless steel (304), contains Molybdenum (3%) which makes this steel even more resistant to corrosion, making it ideal for environments characterised by high humidity and salinity. For this reason AISI 316 steel is suggested for our external doors. AISI 441 stainless steel, on the other hand, is distinguished from 304 by the absence of nickel while maintaining a good level of corrosion resistance.
- IP (International Protection, protection class) The standard CEI EN 60529/1997 (ex CEI 70-1) classifies the degrees of protection of cases for electrical equipment. The first digit indicates the degree of Protection against penetration of foreign bodies while the second indicates the degree of Protection against penetration of liquids.

	FIRST DIGIT	SECOND DIGIT	
	Protection against foreign bodies	Protection against liquids	
0	No protection	0	No protection
1	Protection against solid foreign bodies with a diametre from 50 mm	1	Protection against drops of water falling vertically
2	Protection against solid foreign bodies with a diametre from 12.5 mm	2	Protection against drops of water falling with max 15° inclination
3	Protection against solid foreign bodies with a diametre from 2.5 mm	თ	Protection against drops of water falling with max 60° inclination
4	Protection against solid foreign bodies with a diametre from 1 mm	4	Protection against splash water on all sides
5	Protection against dust	5	Protection against water jets
6	Total protection against dust	6	Protection against intermitpowerful water jets
		7	Protection against intermittent submersion
		8	Protection against continuous submersion

• EN-8158 El 60 and 120 door Door which, considering its high resistance to fire, has the possibility to isolate the flames in case of fire. The letter "E" of the acronym El refers to HERMETICITY, i.e., the ability to hold fire avoiding not only the passage of flames but also of vapours and combustion gases. The letter "I", instead, refers to THERMAL INSULATION or the ability to reduce the transmission of heat to the face not exposed to fire (cold side) up to a maximum of 180°C. The number next to the abbreviation El (60 or 120) indicates in minutes, the time within which the door can withstand fire, based on the tests carried out and the certification obtained.

- FIREPROOF UK door Fire door complying with BS (British Standard) 476 Part 8.
- RoHS (Restriction of Hazardous Substances Directive) Certificate It sets the concentration levels of hazardous substances (heavy metals, PBB, PBDE) in electronic equipment or electrical equipment marketed in the EU.
- STOPSOL Pyrolytic glass with reflective coating obtained by covering one side with metal oxide. It offers excellent sun protection, resistance to pollution and a high level of privacy.
- **UL (Functional Safety Listing Mark)** The UL mark is the most widely recognised and accepted certification attesting to the conformity of a product with US and Canadian safety requirements. It indicates that Underwriters Laboratories Inc. (UL) has tested representative samples of a product and found them to meet applicable standards in relation to their potential fire, electrical shock and mechanical hazards.
- DIN 51130 (Slip resistance class) it is a German standard containing a classification of flooring slipperiness depending on different angles. The angles are obtained from the average of the two operators, who in turn wear the appropriate footwear and harness and walk back and forth on a tilting ramp covered with the material to be tested sprinkled with a specific viscosity oil. The inclination of the ramp is progressively increased until the operator slips. The sliding angle is recorded: the average sliding angle of the two operators is then classified within intervals as defined by the regulation. These intervals define the material's slip resistance classes. The equivalent standard containing the classification according to the slipperiness tested barefoot is DIN 51097.

Inclination angle	DIN 51130 Class	Friction during the test on the ramp
6° = to </=10°</td <td>R9</td> <td>Minimum friction coefficient</td>	R9	Minimum friction coefficient
10°< to =19°</td <td>R10</td> <td>Normal friction coefficient</td>	R10	Normal friction coefficient
19°< to =27°</td <td>R11</td> <td>Higher than standard friction coefficient</td>	R11	Higher than standard friction coefficient
27°< to =35°</td <td>R12</td> <td>High friction coefficient</td>	R12	High friction coefficient
>35°	R13	Very high friction coefficient







• ISO 9001:2015 specifies requirements for a quality management system within an organization which cornerstones are Customer requests, Customer's satisfaction and continuous improvement. In the quality management system, all processes creating and controlling the services supplied to the Customer are described to guarantee that the expectations and needs of the Customer are met. ISO 9001:2015 follows a cycle called «PDCA – Plan, Do, Check, Act», an approach based on processes encouraging risk evaluation methods.



• ISO 14001:2015 International standard, voluntary-based, applicable to every kind of public or private Organizations, that specifies the requirements for an environmental management system. To be compliant to ISO 14001, organisations need to:



- Realise an environmental analysis, in other words reach a deep knowledge of the environmental aspects that an organisation needs to effectively manage, know the legislations and prescriptions applicable and evaluated the impacts;
- Define a Company policy
- Define specific environmental responsibilities
- Define, apply and maintain all the activities, procedures and registrations as indicated in the ISO 14001 requirements.
- UNI 11515-1:2020 This standard gives instructions for the design, installation and maintenance of resilient and laminate floor coverings.



- UNI EN 81-20:2020 European standard that specifies the safety rules for permanently installed new passenger or goods passenger lifts, with traction, positive or hydraulic drive, serving defined landing levels, having a car designed for the transportation of persons or persons and goods, suspended by ropes or chains or jacks and moving between guide rails inclined not more than 15° to the vertical.
- UNI EN 81-21:2018 European Standard that specifies the safety rules related to new passenger and goods/passenger lifts permanently installed in existing buildings where in some circumstances due to limitations enforced by building constraints, some requirements of EN 81 20:2014 cannot be met. This European Standard addresses a number of these constraints and gives requirements for alternative solutions. It is intended to be read and applied in conjunction with the European Standard EN 81-20:2014.
- UNI EN 81-28:2019 European Standard that applies to alarm systems for all types of passenger and goods passenger lifts the standard defines the requirements of the alarm systems aimed at preventing entrapment of users due to the lift not working properly towards bi-directional communication between the lift and an external rescue service. UNI EN 81-70 gives additional requirements for persons with disabilities (e.g., inductive loop, alarm button).
- UNI EN 81-41:2011 European standard that specifies the safety requirements for construction, manufacturing, installation, maintenance and dismantling of electrically powered vertical lifting platforms affixed to a building structure intended for use by persons with impaired mobility: travelling vertically between predefined levels along a guided path whose inclination to the vertical does not exceed 15°; intended for use by persons with or without a wheelchair; supported or sustained by rack and pinion, wire ropes, chains, screw and nut, friction/traction between wheels and the rail, guided chain, scissors mechanism or hydraulic jack (direct or indirect); with enclosed liftways; with a speed not greater than 0,15 m/s; with platforms where the carrier is not completely enclosed. This standard deals with all significant hazards relevant to lifting platforms, when they are used as intended and under the conditions foreseen by the manufacturer. The standard is not applicable to vertical lifting platforms intended for use by persons with impaired mobility manufactured before the norm publication date.
- UNI EN 81-50:2014 European standard containing design rules, calculations, examinations and tests of lift components which are referred to by other standards used for the design of passenger lifts, goods passenger lifts, goods only lifts, and other similar types of lifting appliances.
- UNI EN 81-70:2018 European Standard that specifies the minimum requirements for the safe and independent access with disabilities.

- UNI EN 81-71:2019 European standard that deals with the significant hazards, hazardous situations and events relevant to lifts which can be affected by vandalism when they are used under the conditions as foreseen by the installer. The norm defines 3 lift categories (0, 1 and 2):
 - 0. lift designed to meet the basic requirements of EN 81
 - 1. lift that meets additional requirements to safeguard the installation from acts of moderate vandalism,
 - 2. lift that meets additional requirements in order to protect the installation from acts of serious vandalism.
- UNI EN 81-80:2019 European norm that gives a methodology for improving the safety of existing lifts with the aim of reaching an equivalent level of safety to that of a newly installed lift by the application of today's state-of-the-art for safety.
- un livello di sicurezza equivalente a quello degli ascensori installati di recente applicando lo stato dell'arte odierno in termini di sicurezza.
- UNI EN 660-1:2004 European standard describing the "Stuttgart" test method for determining the wear resistance of the wear layer of polyvinyl chloride floor coverings under laboratory conditions.
- UNI EN 685:2007 The standard establishes a classification system for resilient, textile and laminate floor coverings according to areas and intensities of use (now replaced by UNI EN ISO 10874:2012).

Pictogram	Use	Abrasion resistance
	High domestic traffic	AC3
	High commercial traffic	AC5
	Very high commercial traffic	AC6
	Low industrial traffic	
	High industrial traffic	



- UNI EN 1815:2016 This standard specifies a method for determining the body voltage generated when a person wearing standardized footwear walks on a resilient or laminate floor covering. The test method can be used under laboratory conditions as well as in situ.
- UNI EN 1993 1-3:2015 «Eurocode 3» European norm that provides principles and application rules for the structural design of membranes and corrugated steel sheets obtained by cold bending hot-rolled or cold-rolled flat products, coated and uncoated
- UNI EN 13501-1:2019 (Reaction to fire class) This standard provides the reaction to fire classification procedure for all construction products. According to the standard, reaction to fire is the response of a product in contributing by its own to a fire to which it is exposed, under specific conditions (not to be confused with fire resistance). The products are classified in Euro classes A1, A2, B; C, D, E and F. Products classified as A are non-combustible while those classified from B to F are combustible in ascending order. For all the A to D classified materials, there is a second level of classification according to smoke and particles/fire drops emitted during combustion. For PVC and linoleum floors, «s1» means that smoke emission during combustion is absent or very low.





- UNI EN 13523-1:2017 (6-26) Series of standards that regulate the characteristics of coated metal strips and related test methods.
- UNI EN 13845:2017 This European Standard specifies the characteristics of floor coverings with sustainable enhanced slip resistant characteristics under specified conditions based on polyvinyl chloride and modifications thereof, supplied in either tile or roll form.
- UNI EN 13893:2005 European standard that specifies a method for the measurement of dynamic coefficient of friction on dry floor surfaces (resilient, laminate or textile floors) generally stepped on by shoes.
- UNI EN 14041:2018 This European Standard specifies the essential characteristics for the following types of floor coverings:
 - resilient floor coverings, excluding loose-laid mats;
 - textile floor coverings, excluding loose-laid (barrier) mats, runners and rugs;
 - laminate floor coverings;
 - modular multilayer floor coverings.



- UNI EN ISO 10580:2012 The norm specifies a general laboratory test method for determination of the area-specific emission rate of volatile organic compounds (VOC) and/or the vapour-phase VOC concentration under defined climate conditions. ISO 10580:2010 describes emission test chambers used for the determination of the emission of volatile organic compounds from resilient, textile and laminate floor coverings.
- UNI EN ISO 10582:2018 European norm that specifies the characteristics of non-cushioned, heterogeneous floor coverings, consisting of poly(vinyl chloride) (PVC), supplied in either tile or plank or roll form. Products can contain a transparent, non-PVC factory finish. To encourage the consumer to make an informed choice, this document includes a classification system (see ISO 10874) based on the intensity of use, which shows where these floor coverings give satisfactory service. It also specifies requirements for marking.
- UNI EN ISO 10874:2012 The norm establishes a classification system for resilient, textile and laminate floor coverings. The classification is based on practical requirements for areas of use and intensity of use and is linked to the requirements specified in the relevant International Standard for each type of floor covering.
- UNI EN ISO 12944:2018 The standard deals with the corrosion protection of steel structures by protective coating.
- UNI EN ISO 13845:2017 European standard specifying the characteristics of polyvinyl chloride-based floor coverings supplied in tiles or rolls with advanced slip resistance characteristics under specified conditions.
- UNI EN ISO 23997:2012 This International Standard describes a method for determining the mass per unit area of a resilient floor covering.
- UNI EN ISO 23999:2018 This norm specifies a method for determining dimensional stability and curling of resilient floor coverings, in the form of sheets, tile or planks after exposure to heat.
- UNI EN ISO 24340:2012 This International Standard describes a method for determining the thickness of different layers of resilient floor coverings.
- UNI EN ISO 24341:2012 This International Standard specifies methods for determining the length, width and straightness of resilient or textile floor coverings in sheet form.
- UNI EN ISO 24344:2012 This International Standard describes methods for determining flexibility and deflection of resilient floor covering.

