

# MRL TRACTION PLATFORM ELEVATOR **UFE** BY CTV



## PRODUCT DESCRIPTION

PD210\_07 EN \_\_\_\_\_ 22/02/2022



Vertical platform elevator for passengers with reduced mobility between defined levels, specially designed for residential buildings and dwellings as well as commercial premises.

Depending on intended use, suitable for a wide range of wheelchairs dimensions with or without motorization and with or without assistant.

To be installed in a built lift shaft with automatic landing doors. Tailor made steel structures as option upon request.

## MRL UFE options

225 - 450 kg  
0,15 m/s

GEAR MOTOR  
MOTOR RATED POWER 0,8 kW - 385 kg  
MOTOR RATED POWER 1,5 kW - 450 kg  
2:1

DIRECTIVE 2006/42/CE

GEARLESS OPTIONAL  
800 W

225 - 400 kg  
0,3 m/s

GEAR MOTOR  
GEARLESS MACHINE 1,5 kW  
2:1

VERSION AVAILABLE FOR NON  
EU COUNTRIES

GEARLESS OPTIONAL  
1 kW

225 - 400 kg  
0,5 m/s

GEAR MOTOR  
MOTOR RATED POWER 1,5 kW  
2:1

VERSION AVAILABLE FOR NON  
EU COUNTRIES

GEARLESS OPTIONAL  
1,7 kW

630 - 1000 kg  
0,15 m/s

GEAR MOTOR  
MOTOR RATED POWER 1,5 kW  
2:1

A

Compared to hydraulic equivalent 30% improved energy efficiency and over 50% reduction in installed motor size. Energy class A (ISO25745) consideration.



True machine roomless solution with free-to-choose control panel position anywhere in the building or in the landing door frame.



Extremely quiet operation (< 50 dBA). Reduced vibrations during running in any direction.

No automatic levelling required, thus reducing unnecessary noise and energy consumption.



Environmentally friendly through absence of hydraulic oil. Gearbox oiled-for-life.



Easy installation through low weight components.



Maximum safety level through dual brake system in the gear motor version. Gearless solution optional upon request.



All major components manufactured in Germany. German design of steelwork.



Fully ARD back up battery.



Maintenance free motor.



Tailor-made car solutions available.





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## LOADS OF 225 - 450 KG

BASIC TABLE FEATURES						
TYPE OF CAB CHASSIS	RUCKSACK MECHANICAL PACKAGE					
POWER	SINGLE-PHASE 230 V 1~ 50 Hz <sup>(0)</sup>					
BOARDING	SIMPLE, DOUBLE 90° O 180° <sup>(1)</sup>					
CAR DOORS	2PSO					
	3PSO					
	BUSMATIC					
	WITHOUT DOORS					
STANDARD	MACHINERY DIRECTIVE 2006/42/CE (SPEED ≤ 0.15 m/s) AUSTRALIAN CODES (SPEED 0,3 m/s)					
COUNTERWEIGHT	YES					
DIFFERENTIAL RELATION	2:1					
POWER SUPPLY <sup>(2)</sup>	PITE		HEADROOM		POWER	
	REDUCTOR	GRL	REDUCTOR	GRL	REDUCTOR	GRL
225 kg	155 - 165 <sup>(3)</sup>	250 <sup>(4)</sup>	2650 mm to suit a 250 mm package 2450 mm to suit a 310 mm package	2750 mm, car depth 1250 - 1400 mm 2950 mm, car depth 800 - 1200 mm (Guides 250 mm package)	0,15 m/s - 0,8 kW 0,30 m/s - 1,5 kW	0,15 m/s - 0,8 kW 0,30 m/s - 1,5 kW
315 kg						
385 kg						
450 kg	165					
SPEED	0,15 - 0,3 m/s					
N° STOPS	6 <sup>(5)</sup>					
CAR WIDTH	<b>700 - 1200 mm</b> to suit with 250 mm package and headroom > 2650 mm <b>800 - 1100 mm</b> to suit with 310 mm package and 2450 < headroom < 2650 mm (Pit depth 155 mm for car width over 1075 mm. Pit depth 165 mm for car width over 1075 mm)					
CAR DEPTH	<b>800 - 1400 mm</b> to suit with 250 mm package and headroom > 2650 mm <b>1000 - 1400 mm</b> to suit with 310 mm package and 2450 < headroom < 2650 mm					

<sup>(0)</sup> Three-phase option available.

<sup>(1)</sup> Triple boarding available on request.

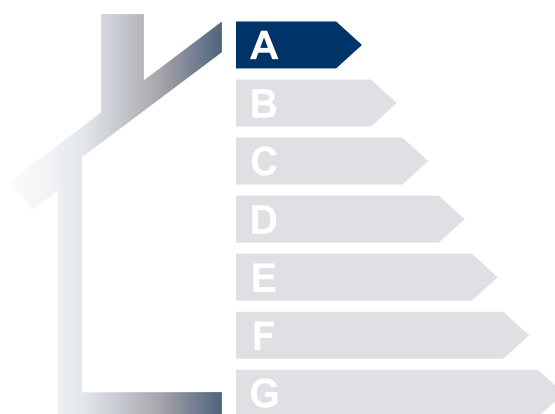
<sup>(2)</sup> The minimum nominal load is obtained by calculating 250 kg/m<sup>2</sup> cabin area.

<sup>(3)</sup> 155 mm pit depth for car width not over 1075 mm. 165 mm pit depth for wider car width.

<sup>(4)</sup> Consult CTV for lower pit depth special solutions.

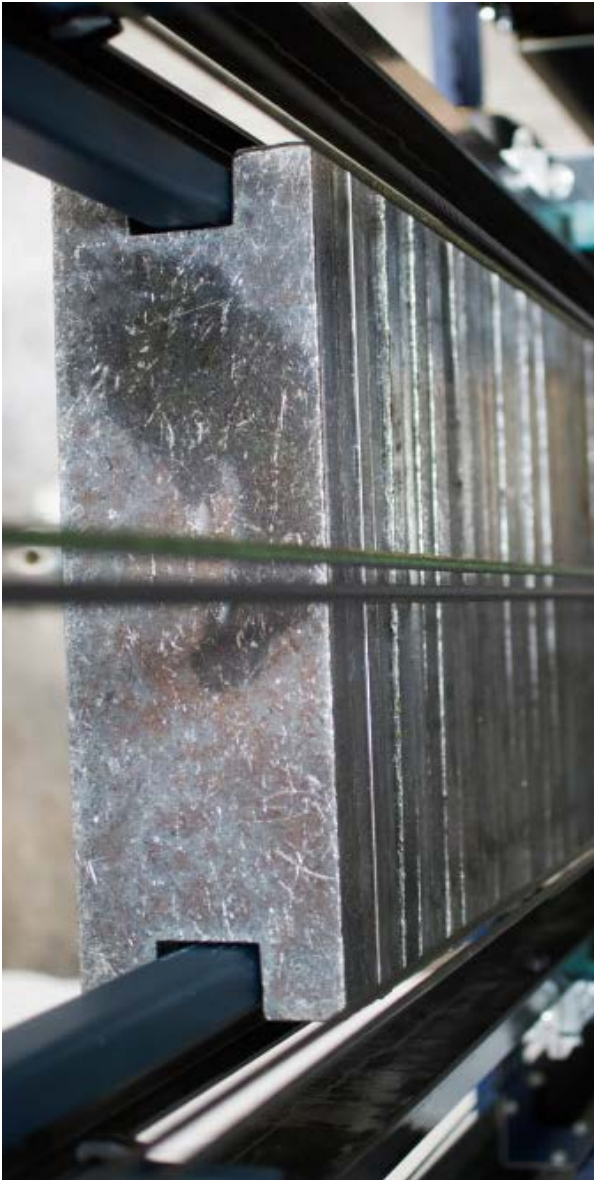
<sup>(5)</sup> Consult for more stops.

## MORE EFFICIENCY



## LESS EFFICIENCY





## TRACTION ARRANGEMENT

Top drive traction elevator with 2:1 arrangement and counterweight.

Suspension via 4 ropes Ø6 mm PAWO 819W, from Gustav Wolf.

Car and counterweight sling with poliamide diverter pulleys Ø200 mm, made by Röchling, that ensure a quite ride operation and a long lasting life expectancy for rope traction. No traction ropes replacement considered for the elevator life expectancy.

Car sling with instant safety gear model SLC/IT100 from Luezar.

Car sling mounted OSG, model Luezar LM12 CD with Toothed belts.

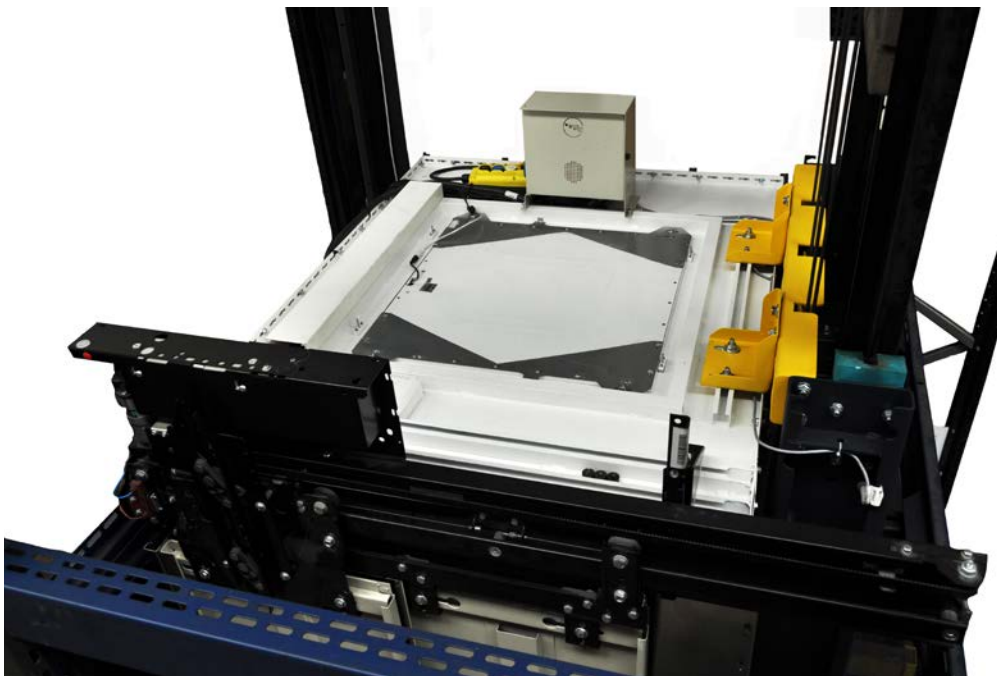


## GUIDE RAIL ARRANGEMENT

T82/9 car sling guide rails. Low friction guide shoes liners made with polyethylene.

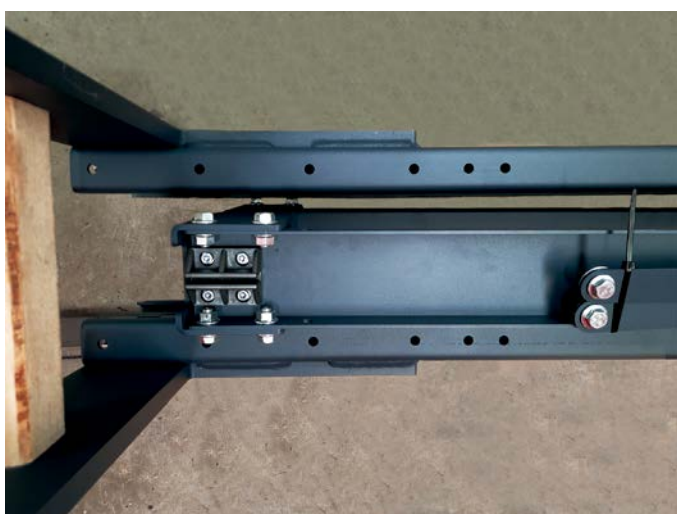
Guide rails supplied in 2,5 m length.

Installation requires a 1.000 kg lifting hook or beam in the headroom.



## PREASSEMBLY

Supply of many components pre-assembled from factory to shorten installation process on site. number of pre-assembled elements and screws are supplied to minimize on-site assembly and loss times.



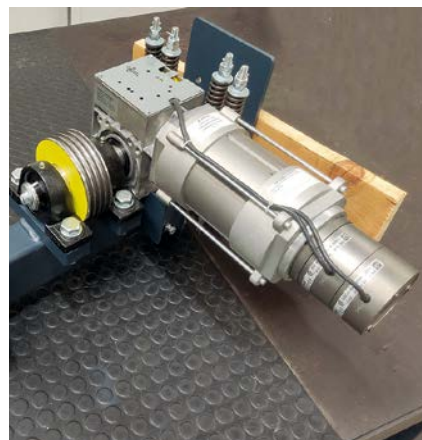


## GEAR MOTOR SOLUTION

Single - speed high quality gear motor, to be mounted on car sling guide rails.

### Advantages:

- Dual 24 Vdc safety brake, on the gear side.
- Emergency crown wheel safety blocking.
- Reduced level of sound and vibration (<50 dBA)
- Open loop 3VF motor for smooth acceleration and deceleration.
- 6 pole motor with IP54 rating.
- High resistance and balanced thermal behaviour. Built-in bi-metal thermistor for operations up to 130°C.
- Steel traction sheave running on SKF A-bearings.
- IP54 motor rating.
- Gearbox oiled-for-life with synthetic oil.
- Minimum guaranteed cycles 1.5 million.

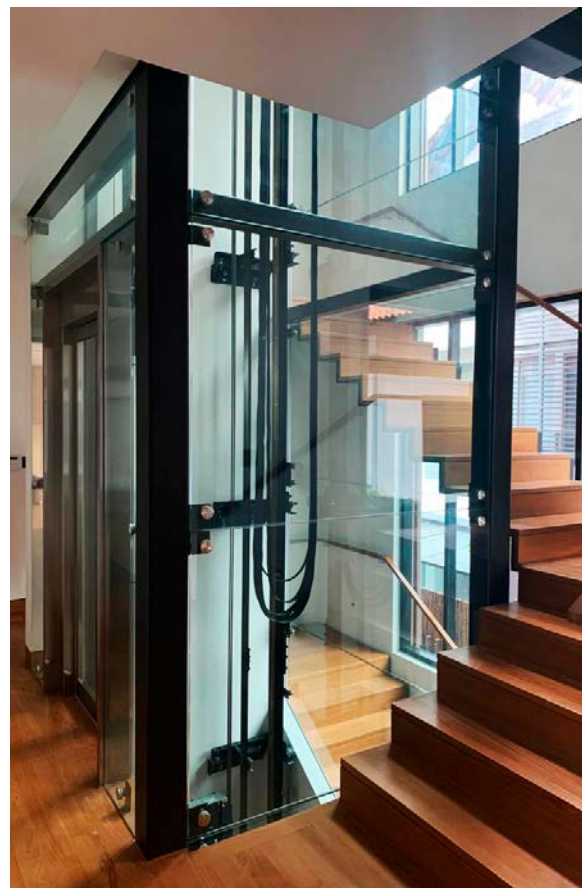


## GEARLESS MOTOR SOLUTION

High quality gearless motor to be mounted on car sling guide rails.

Advantages:

- Double safety brake, with with EU type examination certificate for lifts.
- Reduced level of sound and vibration (<50 dBA).
- Maintenance-free gearless motor.



## CONTROLLER AND WIRING

True machine roomless solution with free-to-choose control panel position anywhere in the building or alternatively in the landing door frame.

Included as standard is a fully ARD back up battery to automatically drive the lift to the designated evacuation floor. UPS inside the controller cabinet considering the gear motor solution 0.15 m/s.

Car, inspection box and shaft installation pre-wired. LED shaft lighting optional.

Wall mounted controller cabinet dimension: 600 x 600 x 220 mm.

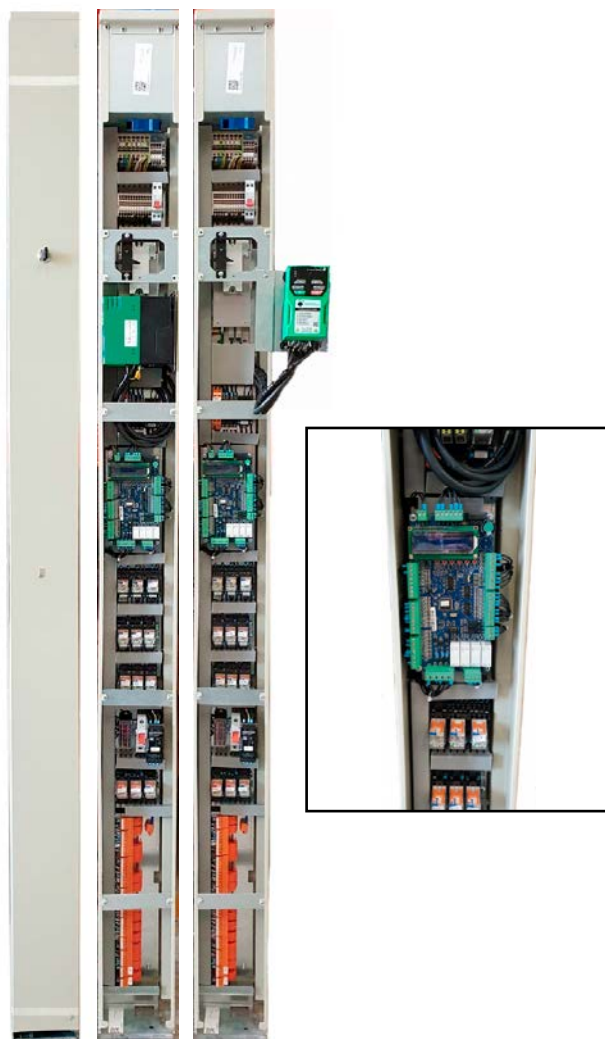
Landing door frame dimension to be 150 mm width to suit the controller, in case of having that option. Back up UPS must be installed in the shaft with this option.

In this option, the emergency SAI must be installed in the elevator shaft.

Back up UPS and inverter to be installed in the lift shaft for gearless motor solution, considering the controller in the landing door box.

Open loop inverter considered for gear motor solution and close loop model for gearless solution.

### INELCA CONTROL PANEL IN THE FRAME



### INELCA





## CAR DECORATION

### LAMINATED

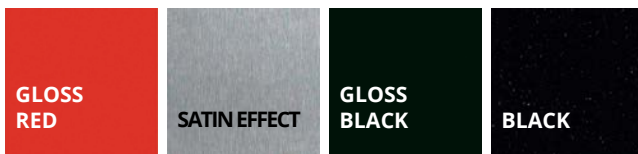
#### NOVA - ML ELEGANCE




#### FINISHES

 The actual sample might differ from the printed sample.

<b>GLOSS BLUE</b>	<b>OCEAN</b>	<b>POPULAR GREY</b>	<b>GLOSS WHITE</b>
<b>GLOSS CASSIS</b>	<b>GLOSS MARENGO</b>	<b>GLOSS RED</b>	<b>GLOSS BLACK</b>
<b>ELEMENTAL CONCRETE</b>	<b>WHITE ASH</b>	<b>SERINGA</b>	<b>TURQUOISE</b>
<b>SANDSTONE</b>	<b>ELEMENTAL CORTEN</b>	<b>CHOCOLAT</b>	<b>WHITE FRANCE</b>
<b>CHINA BLUE</b>	<b>GRAPHITE</b>	<b>ELEMENTAL GRAPHITE</b>	<b>BEECH</b>
<b>NATURAL TEAK</b>	<b>OAK</b>	<b>SATIN EFFECT</b>	<b>COUNTRY CHERRY</b>
<b>BRUNT STRAND</b>			



 The final aspect of the car might differ from the image in catalogue. Our cabins can be customized to your liking. Please consult for other finishes.

## OTHER OPTIONS OF CARS

[www.ctvlifts.com](http://www.ctvlifts.com)







## CAR DECORATION

### MELAMINE FINISHES

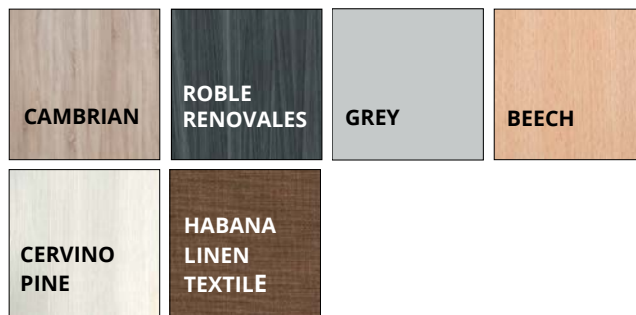
#### NOVA - ML CAMBRIAN




#### FINISHES

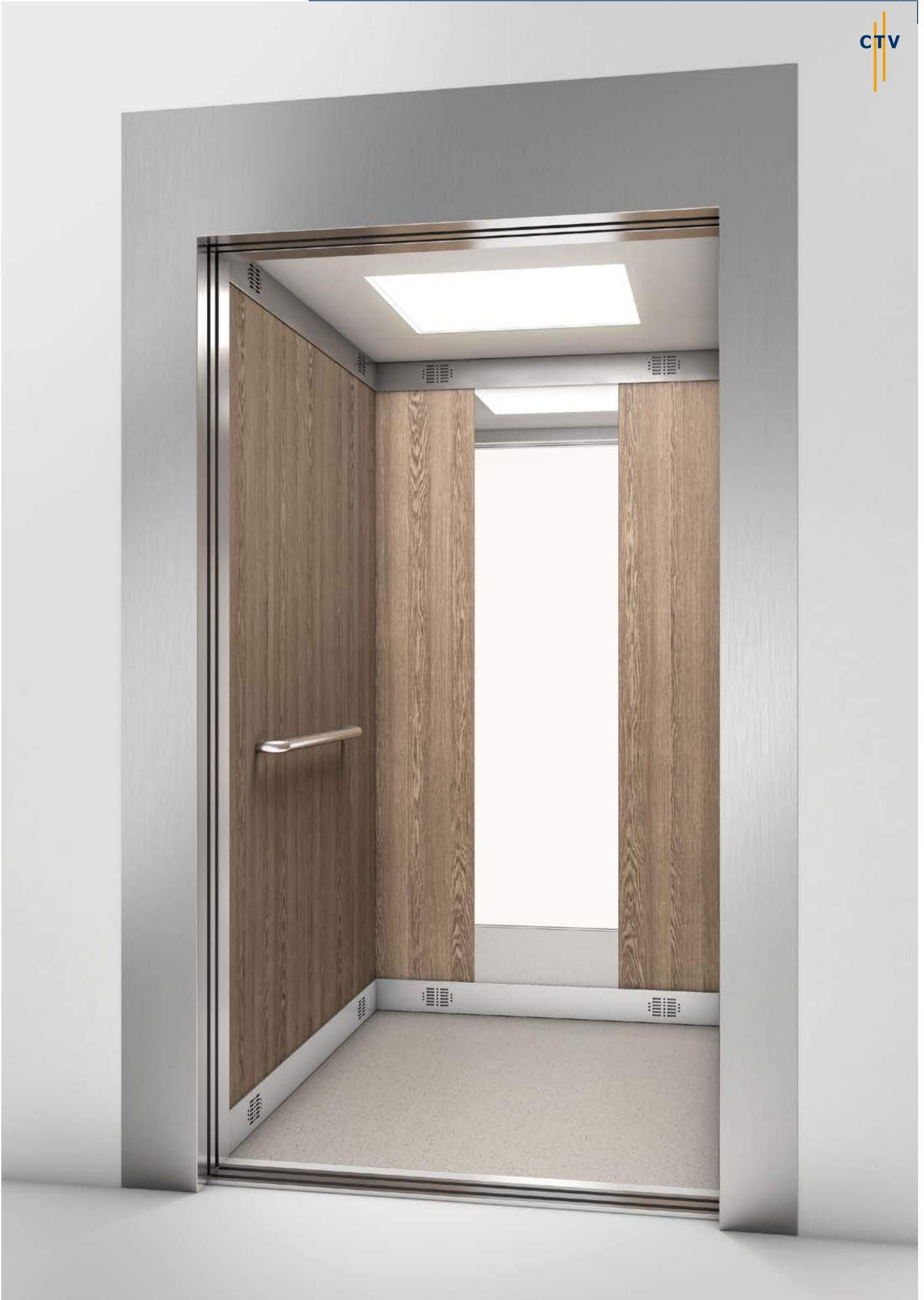


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## CAR DECORATION

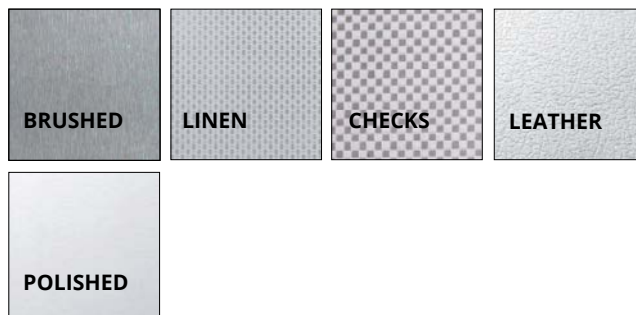
### STAINLESS STEEL FINISHES AISI441 Y AISI304

#### NOVA - INOX

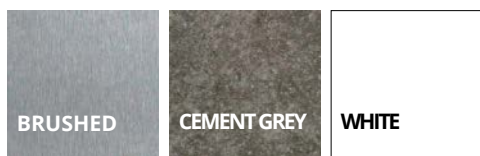



#### FINISHES

 The actual sample might differ from the printed sample.



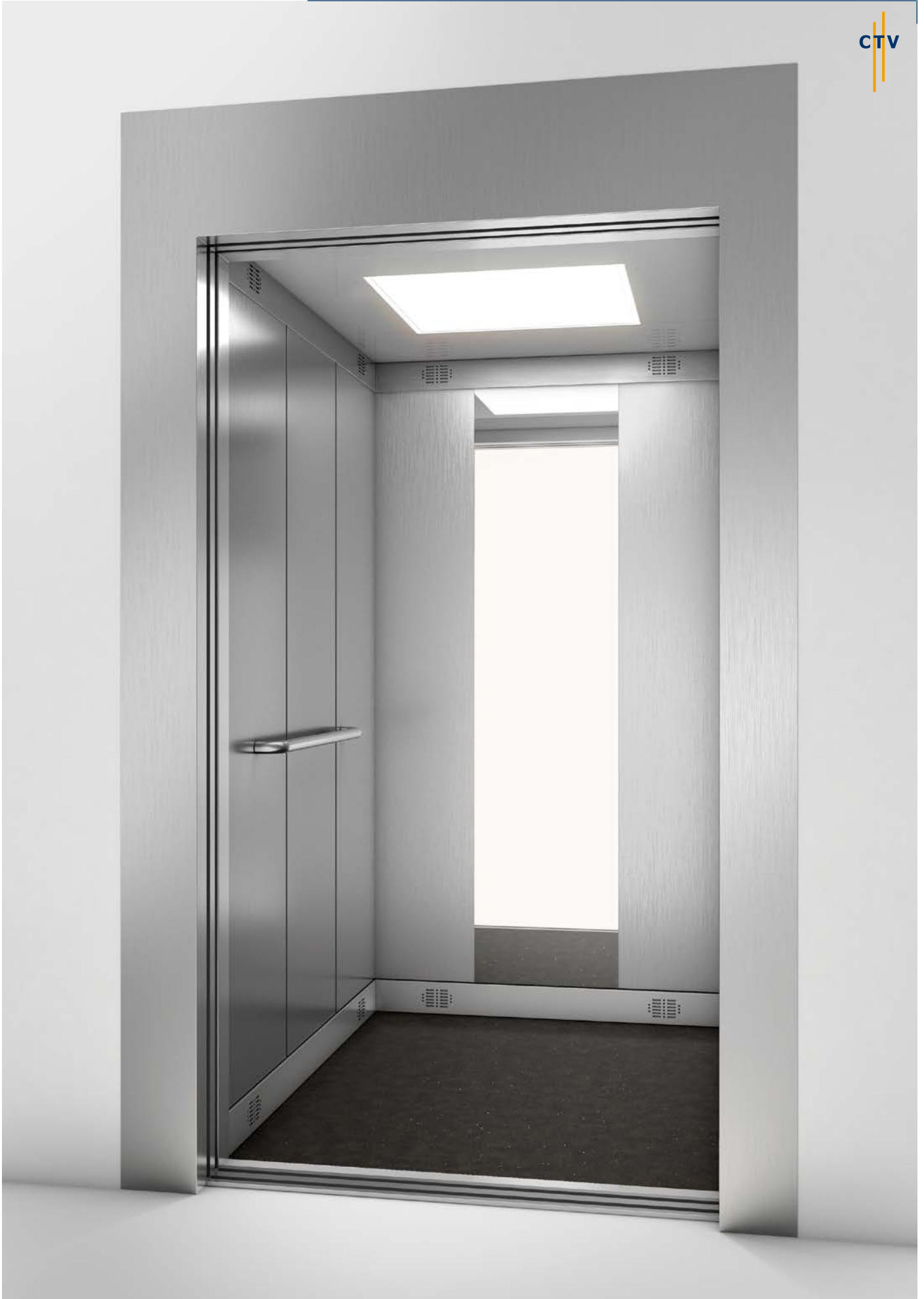
 Other texturing available.



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## CAR DECORATION

### EPOXY RESIN FINISHES

#### NOVA - EP

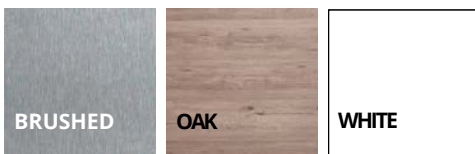


#### FINISHES



The actual sample might differ from the printed sample.

<b>WHITE</b> RAL 9016	<b>OYSTER WHITE</b> RAL 1013	<b>BEIGE</b> RAL 1019	<b>DARK GREY</b> RAL 7010
<b>CREME</b> RAL 9001	<b>GREEN</b> RAL 6019	<b>PEARL BEIGE</b> RAL 1035	<b>PEARL LIGHT GREY</b> RAL 9022
<b>WATER BLUE</b> RAL 5021	<b>GREY</b> RAL 7032	<b>GREY METALLIC</b> RAL 9006	<b>BLACK</b> RAL 9005
<b>PIGEON BLUE</b> RAL 5014			

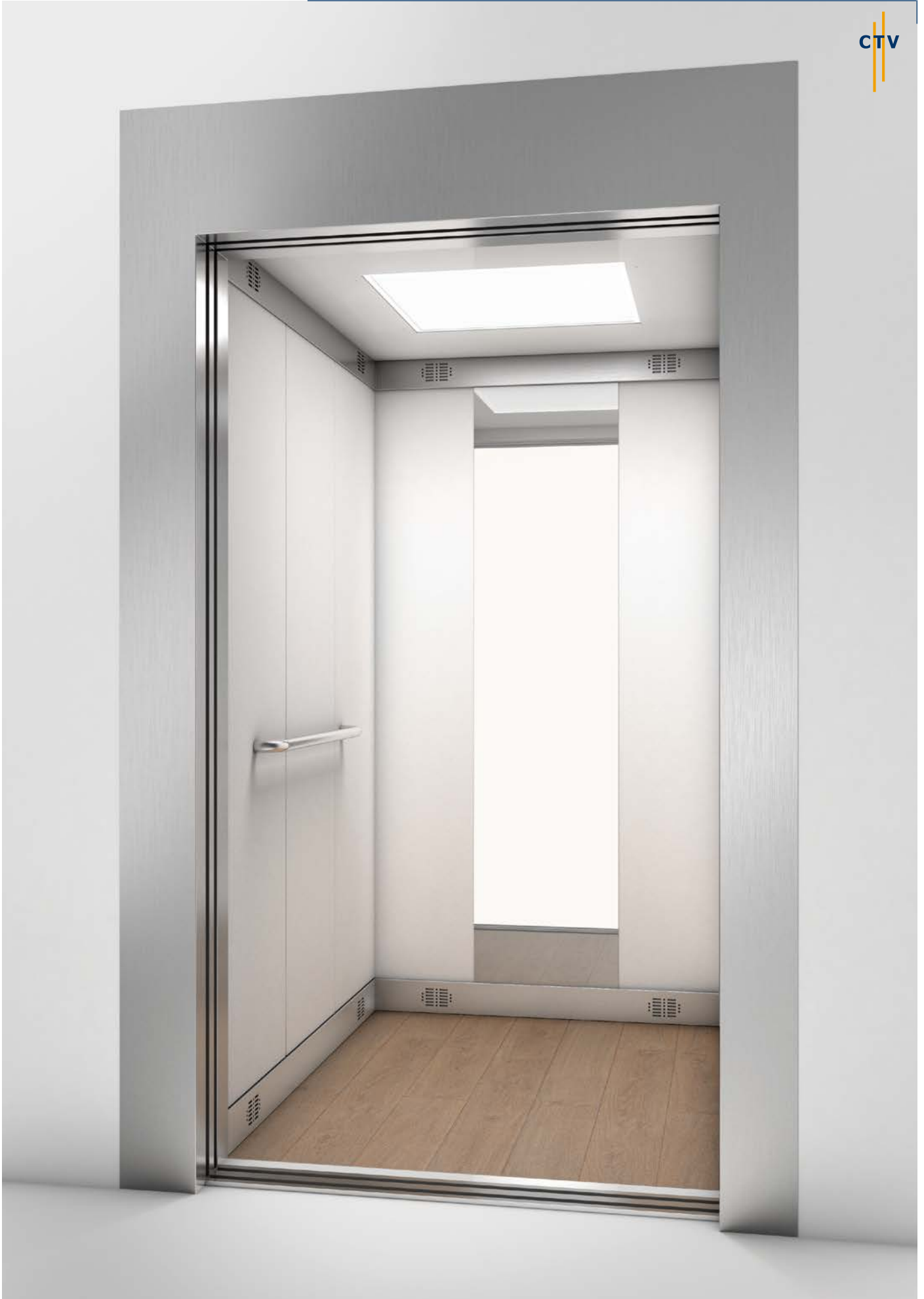


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## OTHER OPTIONS OF CARS

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## CAR ACCESSORIES

## CEILING



LED PANEL LIGHTING



LED SPOTLIGHTS

## FLOOR

## ANTISLIP RUBBER



## ARTIFICIAL STONES

NATURAL GRANITES <sup>(1)</sup>

 The actual sample might differ from the printed sample.

<sup>(1)</sup> WITH A MAXIMUM THICKNESS OF 25 MM.  
Floor preparation for stone installation to be supplied by the client.





CAR ACCESSORIES

HANDRAIL

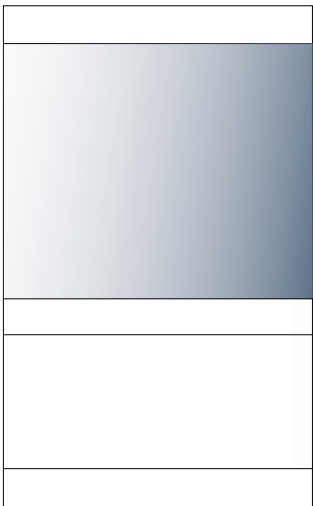


CURVED, CIRCULAR, Ø35 MM IN S/STEEL (OPTIONAL IN RAL COLOURED EPOXY)

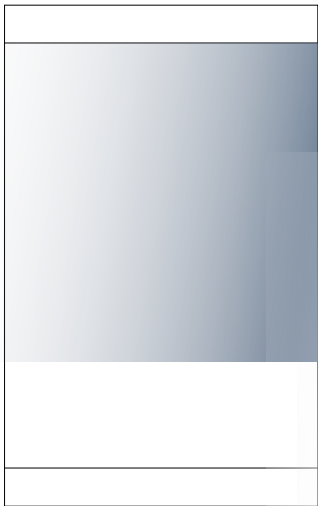
MIRROR CONFIGURATIONS



strip



Half mirror



3/4



full mirror



## CAR & LANDING OPERATING PANELS

Brushed s/steel COP and LOP in 2 available options:

- Flush mounted.
- Surface mounted.

There are different types of push buttons:

- CEHAM 3D.
- VEGA ACHILLE.
- VEGA ITALO.
- SCHAEFFER range available upon request.

Push button provided with "OCCUPIED" LED. Keyswitch or key fobs upon request.

The COP includes:

- Floor push buttons, indicating selected floor.
- Door open push button.
- Alarm & emergency call push button.
- Integrated two way intercom.
- Load plate.
- Position indicator upon request.
- Emergency lighting in car ceiling.



## EMERGENCY PHONE

Two-way emergency phone system according to EN81-28 integrated with COP panel. Preparation of COP for emergency phone system by others upon request.



**SURFACE MOUNTED COP (OPTIONAL).**



## RECOMMENDED CAR DIMENSIONS

The standard EN81-41 includes some recommendations concerning car dimensions and nominal payload (Q), helping the client to decide what suits their requirements best:

- Wheelchair or single standing user: 800 x 1250 mm (250 kg).
- Type A and B wheelchair with assistant: 900 x 1400 mm (315 kg).
- Type A and B wheelchair with assistant in car where the wheelchair can turn inside the car: 1100 x 1400 mm (385 kg).

According to the above, CTV offers tailor-made solutions for car dimensions. Our standard layout drawings show some of the most common dimensions for each nominal load (Q). A minimum payload of 250 kg/ m<sup>2</sup> of car area is to be considered at any time.

Most common examples:

- 900 x 1000 mm, 225 kg.
- 900 x 1400 mm, 315 kg.
- 1050 x 1200 mm, 315 kg.
- 1100 x 1400 mm, 385 kg (400 kg).

## DOORS

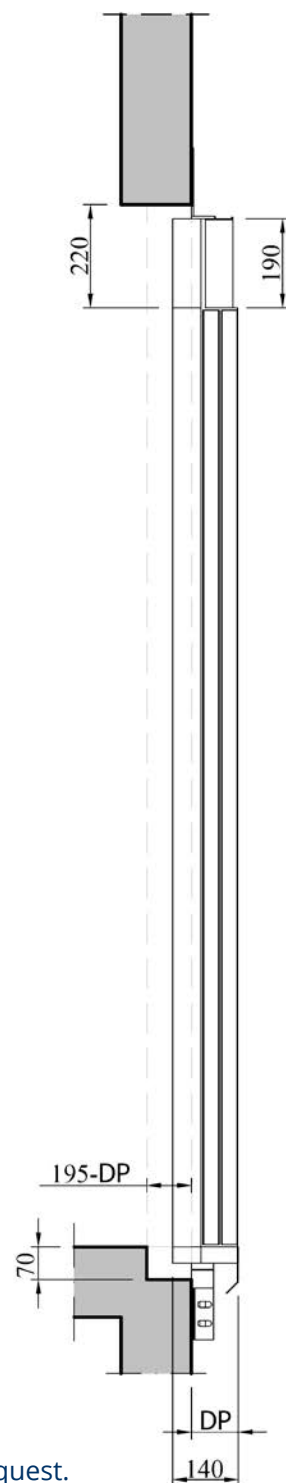
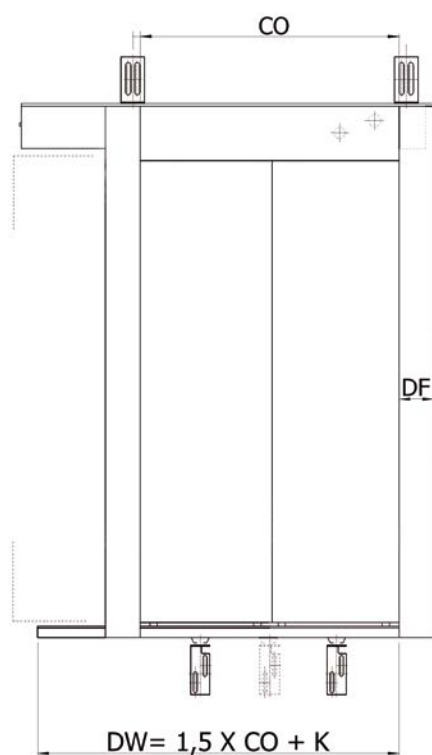
The elevator is available with single and through car (180°) door arrangement.

Standard design allows for two panel side opening door configuration on car and landings with clear openings ranging from 700 to 900 mm in 50 mm steps.

Standard door frame width is 90 mm. The required width for the option to place the control panel in the frame is 150 mm.

Standard door is the Augusta EVO by Wittur. Other configurations and manufacturers upon request.

Finishes are those available from the manufacturer.



**CO**=Clear opening 700 - 1000mm.

**DF**= Landing door frame width. 90mm is standard, 120mm upon request.

**DW**= Landing door width. It is the door width, taking the maximum dimension among the operator width and tracking sill width & door panels width.

**K**= it is a constant depending on the clear opening.

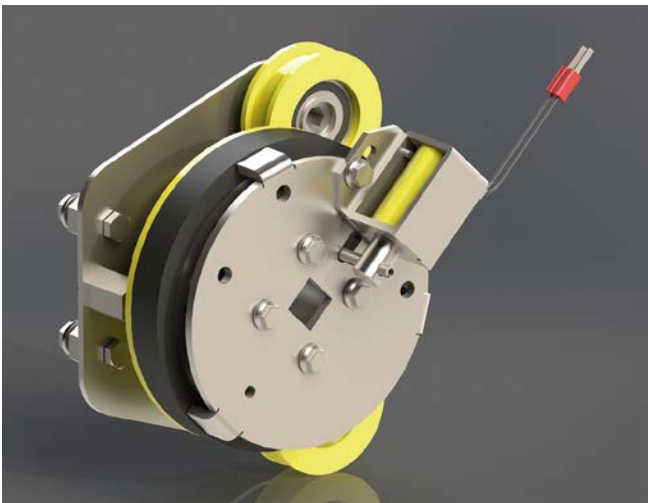
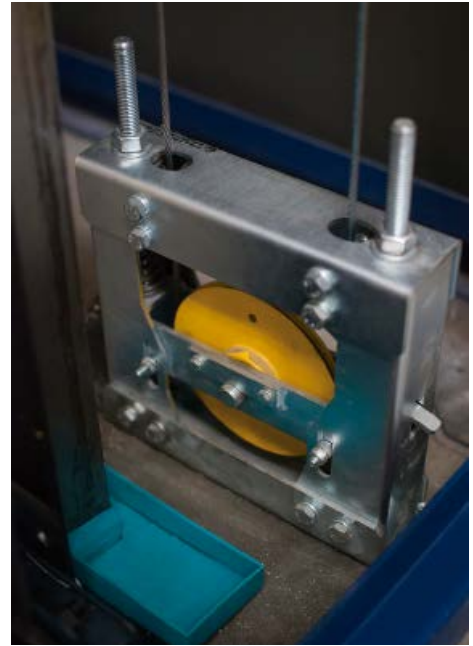
**DP**= Landing door projection in the shaft.





## SAFETY DEVICES

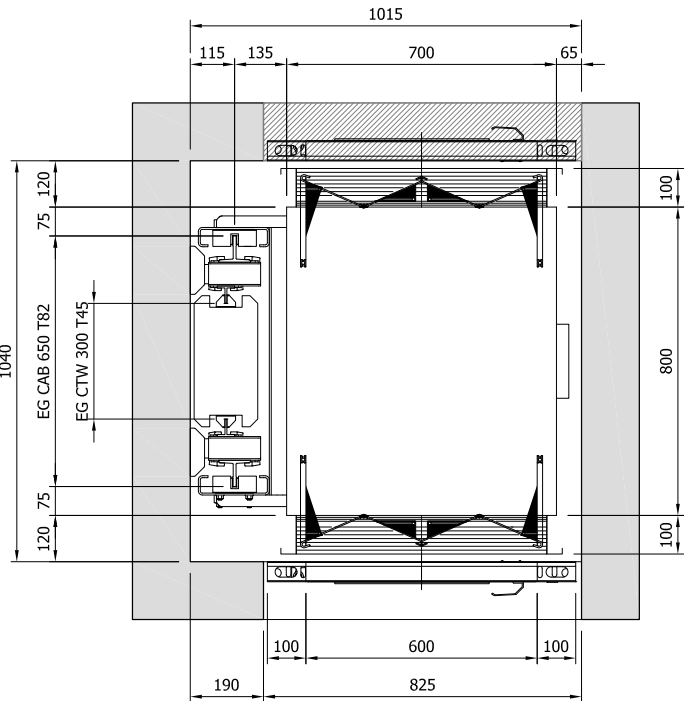
- Dual safety brake on gearbox.
- Emergency crown wheel blocking.
- Manual pit locking device, with electrical position control. "Stop" button for access to the pit.
- Load weighing device.
- Photocell or photoelectric barrier in cabin.
- Instantaneous safety gear Luezar ref. IT-100 en cabina.
- Car sling mounted OSG, by Luezar, model LM12CD.
- Car door locking to EN81.20/50.
- Car doors with closing force limitation, automatic re-opening and obstacle memory feature.
- Acoustic emergency alarm.
- Stop switches in pit and on car top.
- Contact controlled maintenance trap door in car for safe maintenance from inside car.
- Contact controlled mechanical pit prop to guarantee refuge space for maintenance staff.



**CAR SLING MOUNTED OSG BY LUEZAR.**



GUIDES AT ONE SIDE. BUSMATIC CAR DOOR AND SWING HINGED LANDING DOOR CONSIDERED. CO 600 -700 MM.  
SINGLE AND 2 X 180° BOARDINGS

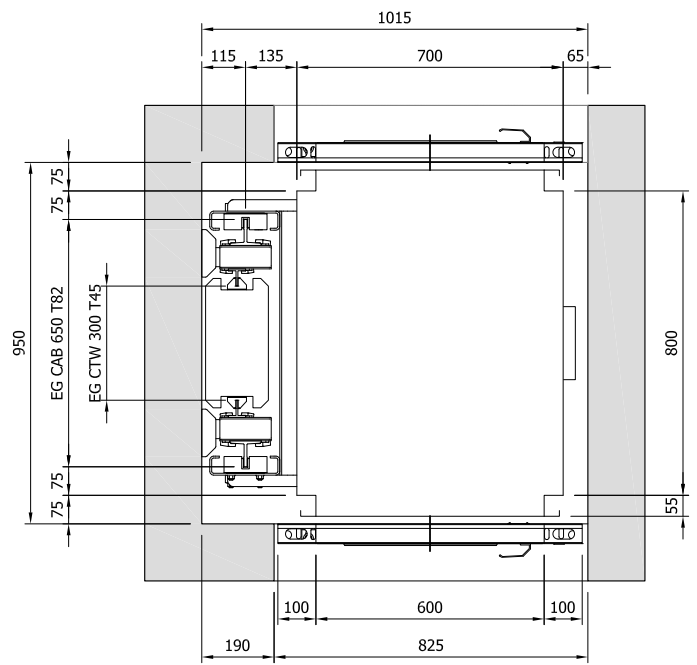
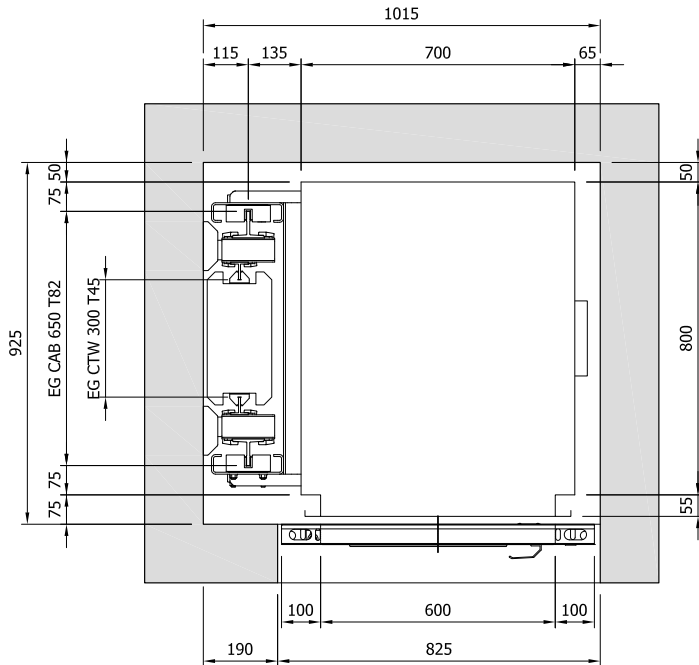


Technical drawing of a rectangular table with dimensions and component labels. The overall dimensions are 1015 mm in width and 1230 mm in height. The table features a central rectangular top with a width of 600 mm and a height of 850 mm. The top is supported by four legs, each with a width of 100 mm. The table is equipped with two sets of casters: EG CAB 650 T82 (front casters) and EG CTW 300 T45 (rear casters). The dimensions of the casters are 115 mm, 135 mm, 700 mm, and 65 mm. The height of the casters is 190 mm, 140 mm, 140 mm, and 190 mm. The table is shown in a perspective view with a light gray background.

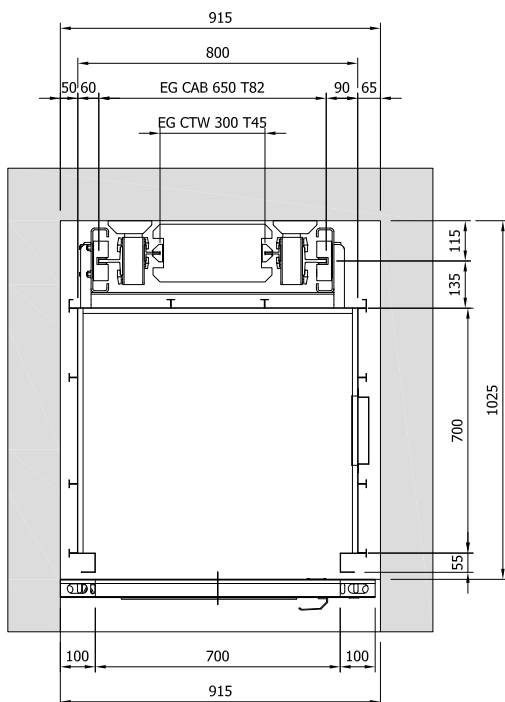


## MINIMUM SHAFT DIMENSIONS LAYOUT

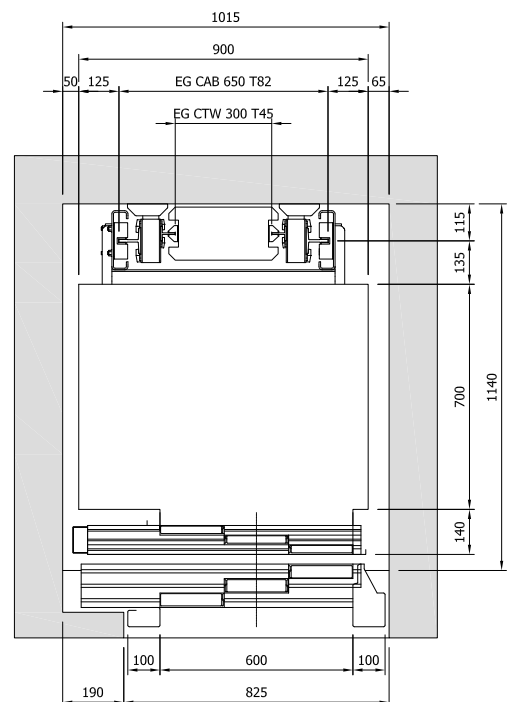
GUIDES AT ONE SIDE. NO CAR DOORS CONSIDERED AND AUTOMATIC ELECTRIC LOCKS IN LANDING DOORS



GUIDES AT REAR WALL, NO CAR DOORS, ELECTRIC LANDING DOOR LOCKS CONSIDERED



GUIDES AT REAR WALL, TELESCOPIC 3PSO DOOR CONSIDERED





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PLATAFORMA DE ELEVACIÓN VERTICAL MRL **UFE**