

# MINIWATT

Electrical Lifting Platform



High Efficiency Electric Lifts



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# WeAre

# The first company to produce battery-only plants

#### Over 15 years of development

A.R.E. Srl was founded in 2009 thanks to the futuristic vision of Franco Antonelli, an elevation sector pioneer. His experience, which dates back to 1953, has revolutionised the way we design lifts with insights that have since become major sector milestones.

In 1995, Franco took up the challenge of finding a solution to the issue of accessibility for disabled people, a problem which the regulations at the time did not allow a traditional lift to solve. This led to him developing innovative technology for home lifts. His insight enabled home lifts to exceed the traditional 4-metre limit and transformed these products with their limited installation opportunities and reputation for being unsafe into highly reliable solutions that are considerably more versatile than traditional lifts.

Franco's search for new solutions continued in the years that followed. In 2003, he introduced a revolution in the industry: the use of batteries as the main power source for lifts. Up until that point, in fact, batteries had only been used on the sidelines and for stairlift.

Franco Antonelli's entrepreneurial vision was realised in 2009 with the birth of A.R.E., which stands for Ascensori a Risparmio Energetico (Energy Saving Lifts). Today, under the leadership of Franco's son, Filippo Antonelli, A.R.E. continues to invest in technological research for developing increasingly efficient, cutting-edge solutions.





Energy efficiency has always been our goal. We invest constantly in the development of technologies that offer innovative, high energy performance solutions.

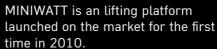


# Our technology

# Patented technology ARE SMART-POWER®

The cabin-free platform





Unlike other traditional elevators it doesn't have a car but a platform with linen stainless steel safety edges. MINIWATT, like all our lifts, benefits from ARE SMART POWER technology.



#### Anti-Blackout System

The MINIWATT Platform's main power supply is based on the use of batteries. It is, therefore, possible to continue using the lift even if there is an unexpected power cut, which guarantees accessibility and safety at all times.



# **Energy recovery** system

While in use, the energy produced by MINIWATT is not wasted as heat but stored in the batteries by optimising the performance levels of the lift and dramatically bringing down electricity supply costs.



# Commited power

MINIWATT consumes just 130W, on a par with that needed to use everyday electrical appliances.



#### SOL-ARE Solar panels

The possibility of having the MANGUSTA platform with solar panels means solar power can be used as a source of sustainable energy.



# Highest energy efficiency

MINIWATT offers higher performance levels than those of an oleodynamic lift with lower electricity consumption.



## Anti-Blackout System

A.R.E. technology, unlike that used by other manufacturers, relies on the use of BATTERIES as the main power system for its lifting systems and only uses the power grid to run the battery charging

system.
That technology guarantees that
MINIWATT can operate normally
even in the event of a power cut
(on average up tp 60 runs).

This is the concept of "ALWAYS WORKING" common to all A.R.E. Lifts.





# Maximum power used

Most of the contracts for residential homes have a power usage of around 3 kW with a tolerance of +10%, that is, it is possible to withdraw up to 3.3 kW without any time limits

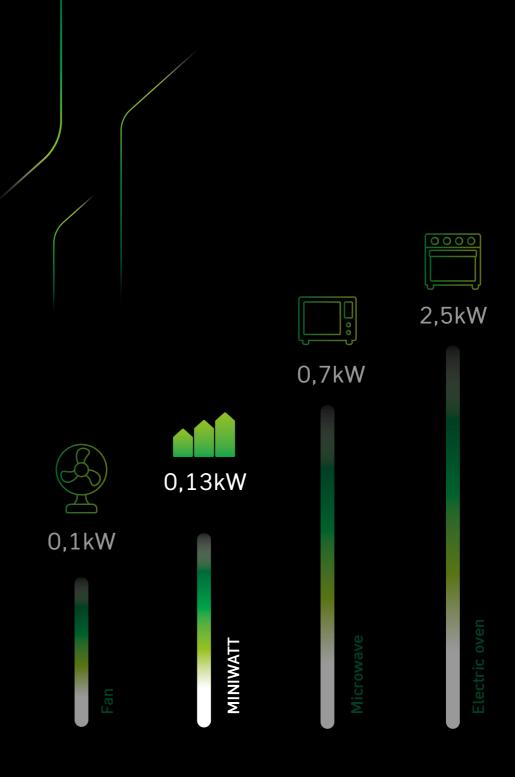
Over and above this limit, the supplier automatically cuts the energy supply by making the meter switch "trip" which then needs to be manually re-activated.

Frequent cut-offs indicate a need for more power to meet the higher demands. In these cases, a request will need to be made to the supplier to increase the power supply by changing the existing contract and this will involve higher supply costs.



Thanks to the technology developed by A.R.E., the maximum power used by MINIWATT is just 0.13 kW, on a par with that of an average electrical appliance.

There is no need, therefore, to change the supply contract stipulated, nor is there any need to install another meter with a higher power level. This is an advantage as the supplier's management costs for supplying electricity will not increase.



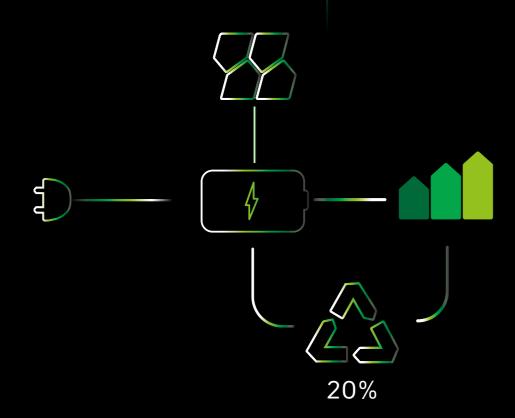
Oleodynamic platform: 2,7 kW

# Energy recovery system



The MINIWATT platform can generate energy during normal usage phases: when the platform is going up empty or when the platform is going down full. The energy produced is not lost but stored in the batteries in order to be used for the next travel.

Thanks to the use of this technology on average, one in every five times it is used, it does not absorb energy from the grid but uses what has been stored in the batteries. Self-powering guarantees a real reduction in consumption which translates into lower running costs.







#### SOL-ARE Recharge from solar panels



SOL-ARE ® is The new technological innovation patented by ARE. The main function of SOL-ARE is to optimise the battery charging process by using solar energy produced by the photovoltaic panel.

#### **ENERGY SAVING**

The system automatically selects the ideal energy source (grid or photovoltaic panel) in order to reduce the amount of energy drawn from the grid, until it reaches a consumption level of ZERO.

#### **ENVIRONMENTAL** SUSTAINABILITY

Integrating the photovoltaic panel in a system is environmentally friendly because it promotes the use of renewable energy sources.

#### **AUTOMATIC MANAGEMENT**OF THE ELECTRICAL POWER

SOL-ARE® manages battery charging in a smart way, automatically changing the set operation mode, if the frequency of platform use requires it.

#### AUTOMATIC MANAGEMENT OF THE ELECTRICAL POWER

The system decides the amount of current to draw from the grid autonomously, in compliance with the parameters defined for the minimum and maximum power.

#### **HOURLY PROGRAMMING**

Being able to set the charging mode on an hourly basis, allows you to adapt the charging strategy to the daily uses of the lift, in order to minimise the consumption of electricity from the grid.

SOL-ARE® is equipped with 3 operating modes that the user can set on an hourly basis throughout the day, according to the expected use of the MINIWATT platform.





to be used during periods of moderate traffic.



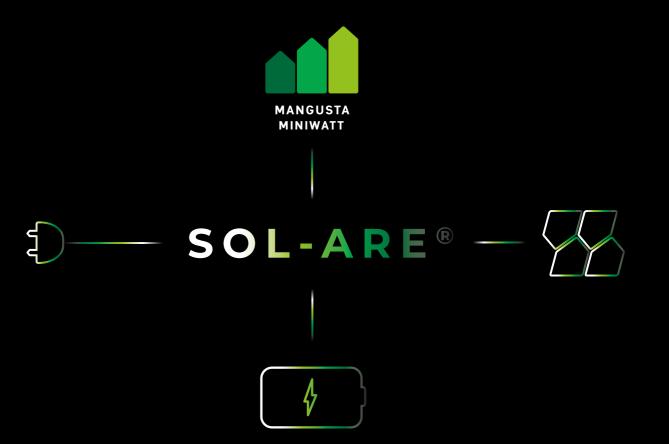
**ECO HYBRID** 

to be used during periods of heavy traffic.



**ECO NIGHT** 

to be used during periods of low or no traffic.



## Other advantages

# Not only energy saving



# Comfortable & quiet

Soft departure and arrival, stopping precision and silence are the distinctive features of MINIWATT, designed and manufactured to offer maximum comfort.



# Eco-friendly & clean

MINIWATT respects the environment because it does not use any kind of oil, even as a lubricant for the guides.



## Motor room less

With MINIWATT, there is no need for space to house oleodynamic control units and manoeuvring switchboards. The motor unit is located inside the lift well and the manoeuvring switchboard can be incorporated into a floor door.



#### Safety

MINIWATT has a speed limiter which prevents uncontrolled cabin movement wherever it is. This limiter equates to compulsory devices found in lifts which comply with EN81-20:2014, 5.6.



# The cabin-free platform

# The design solution

#### Each Miniwatt is a unique piece

MINIWATT is a battery-powered electric lifting platform.
Unlike conventional elevators, instead of a cabin it has a platform with sensitive edges made of linen finish stainless steel.

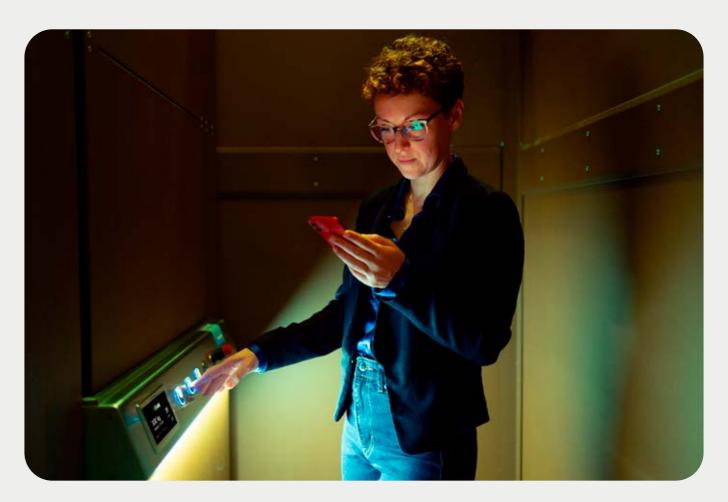
The platform is located inside a shaft, which can be built in masonry or a metal structure.

MINIWATT blends in perfectly with the space it is installed in.

The mechanics, in fact, are hidden by a guard that can be made of traditional RAL painted sheet metal or stainless steel if an even more elegant effect is required. One of MINIWATT's most important features is that it can serve the top floor landing with a gate instead of a conventional door.

This makes it the ideal choice for any environment with a low-height top floor, as is often the case with attics and/or lofts.

Thanks to its wide range of materials and colours, each MINIWATT is a unique item that can satisfy any customer request.







## Swing doors & Gate

Semi-automatic swing doors, manual opening and automatic closure by return spring. Adaptable to any environment, with combinations of finishes, colours, glass and sizes. The aluminium handle shown in the pictures is included with the door.

#### **WINDOW**



C1 standard model







optional model



PS1 optional model



optional model



٧3 optional model



D7 optional model



D1 optional model

Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish

Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish





### FIRE RESISTANT optional model

EI-120 Fire resistant single panel swing door with electrical safety lock.
Semiautomatic, manual opening and automatic closing with return spring and damper, uprights with carters.





#### THERMAL BREAK optional model

Thermal break door to a hinged degree of transmittance thermal U = 2,12 W/mqk mineral wool in the leaf and in the frame (box). Gaskets of parafreddo stop along the door perimeter and lower floor hood profile.



#### ALLUMINIUM optional model

Single panel Alluminium

Panoramic model swing door with mechanical safety lock. Leaf made by extruded aluminium profile and panoramic glass without glazing beads, uprights and lintel made by extruded aluminium if the width is 100 mm, if different builted in steel sheet and aluminium covered, stainless steel sill profile. Semiautomatic, manual opening and automatic closing with return spring and damper. Uprights with carters.

Natural Alluminium | RAL Paint finish Alluminium



Stainless steel tube handle T20



Profils in natural silver color anodized aluminium



#### ARMOURED optional model

Armored door with reinforced frame and door leaf, steel hinge. Armored lock with 4 pins with or without latch variant key/ key or external key inner shell. Semi-automatic, manual opening and automatic closing by return spring and shock absorber, uprights carterized. Vertical guardrails on request.



Armoured lock

Rust-proof Paint finish | RAL Paint finish | Galvanised & RAL Paint finish



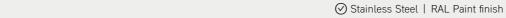
#### CRYSTAL optional model

Crystal model single panel swing door with safety lock. Leaf in tempered laminated glass, stainless steel handle and hinges. Semiautomatic, manual opening and automatic closing with adjustable hydraulic door closer, located inside the lintel and provided with 90° stop. Uprights with carters.



optional model

T20/30 | RC40 | TC30 Profiles in natural anodized silver aluminum





#### Metal structure

MINIWATT can be supplied complete with metal structure well suited to being positioned both inside and outside the construction.

In order to meet all our customers' requirements, descent walkways are available (with parapets in metal or glass) with completely closed walkways, complete with transom windows and rain canopies (with sheet metal or glass cladding) and RAL painted side doors.

All the structures comply with current construction standards. It is possible to request glass cladding and panels in RAL painted metal sheets.

ORAL Paint finish | Galvanised & RAL Paint finish











# **Finiture**

## RAL paint finish<sup>1</sup>

#### standard

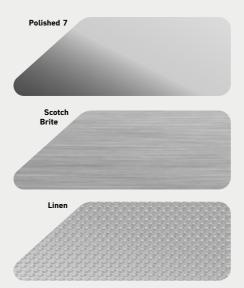
The colours shown may not be correctly represented. Please refer to the official RAL cards when choosing the RAL colour.

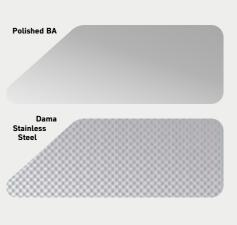


## Stainless steel

#### optional

We recommend choosing from the available options by following the table below.





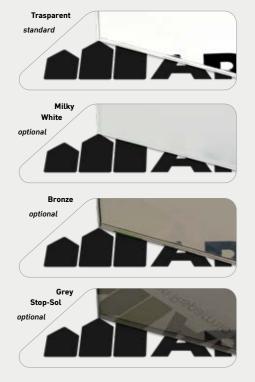
STAINLESS STE	EL	For indoor	For outdoor	Seafront
AISI 430 Scotch Brite		$\odot$	×	×
AISI 304 Polished BA		$\bigcirc$	$\otimes$	×
AISI 304 Polished 7		$\odot$	$\otimes$	×
AISI 304 Dama Stainl	ess steel	$\odot$	$\otimes$	×
AISI 304 Linen		$\odot$	$\otimes$	×
AISI 316 Polished BA		$\odot$	$\otimes$	$\otimes$

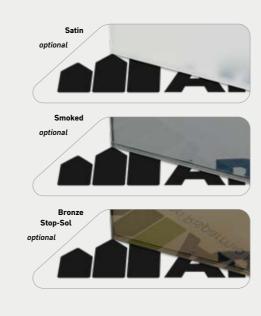




#### Glass

For each environment, we offer you the opportunity to choose the finish that best enhances it.





Window swing door | Plugging structure | Crystal door | Alluminium door | Crystal gate | Alluminium gate Panoramic gate

#### **PVC**

#### standard

These floors are a PUR Pearl surface, a combination of embossing and lacquering that guarantee the finished smooth and elegant matte feature that is highly resistant to scratches, tread and wear.





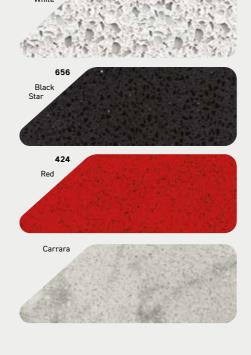


#### **Granit Touch**

#### optional

A mix obtained using grits of granite, quartz, glass and interlacing of glass mosaic. Most of the raw materials used are obtained by recycling Post-Consumption products. The perfect combination of these materials creates the right balance between technology and respecting the environment.





## Finishing summary

		Gate	Swing doors	Cabinet	Structure	Mobile panel	Panelling
Rust-proof Paint Finis		0	0	0	×	×	×
and RAL	Galvanised and RAL Paint finish  RAL Paint Finish		0	0	0	×	×
			S	S	S	S	S
Stainless S	Stell	0	0	0	0	0	0
Natural Alluminiur	(		0	×	×	×	×
RAL Paint Finis Aluminium		0	0	×	×	×	×

 $O = optional \mid S = standard \mid x = non provided$ 





# Accessories

## Display



○ Car display

# SMART standard

Energy level display



✓ Landing display

# TFT optional

High-resolution display Available 4.3" e 2.8"



○ Car display

## TRICOLOR optional

LCD display Frame or flush antiscratch and antiimpact transparent polycarbonate screen



Landing display

# ICARO optional

LCD display Frame or flush antiscratch and antiimpact transparent polycarbonate screen

#### **Buttons**



# STANDARD standard

AISI 304 stainless steel button with braille.



# VANDAL-PROOF IP54 optional

Vandal-proof button with braille with degree of protection IP54.



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# Landing control panel optional



#### AIDA 65

Width 65 mm. Available with con icaro wire display. Wall secured, without building work

Scotch-Brite stainless steelPolished stainless steel



#### **AIDA 85**

Width 85 mm.
Disponibile anche con
display TFT verticale
4.3"
Wall secured, without
building work

Scotch-Brite stainless steelPolished stainless steel



#### **SOFT 75**

Width 75 mm. Available with con icaro wire display Possibility of box to be walled

Scotch-Brite stainless steelBlu polished stainless steel





#### **VENICE 80**

Width 80 mm. Available with TFT vertical display 2.8" Installable only with a recessed box

Black glass White glass

#### Handle

optional



Scotch-Brite stainless steel AISI 304

40 x 15 x L 1260

#### Q20

Scotch-Brite stainless steel AISI 304

20 x 20 x L 320

#### RC40

Scotch-Brite stainless steel AISI 304

40 x 10 x L 500



stainless steel

AISI 304 ø20 x L 300 ø30 x L 500



#### TC30

Scotch-Brite stainless steel AISI 304

ø30 x L 500 ø30 x L 1000



## **Enabling system**

optional

#### **ALPHANUMERIC KEYPAD**



Backlit, IP 68, s ingle contact only 120 x 58 x 22 mm

✓ Landing



#### **I-BUTTON**

Vandal-resistant electronic key. IP51



#### **ENABLE KEYS**

Key contact. IP51 available:

- 2 positions, 1 extraction
- 2 positions, 2 extractions

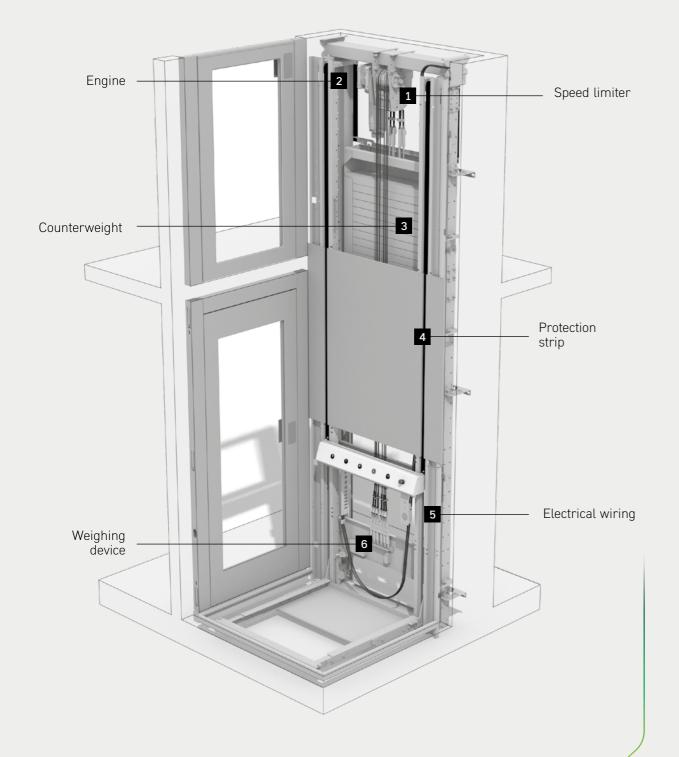
## AUTOMATIC SWING DOOR OPENING SYSTEM







# **Technical** specifications



#### **Technical features**

Capacity	300 kg	400 kg
Reference legislation	Direttiva Macchine 2006/42/CE -	EN81-41:2011 (where applicable)
Capacity max (People)	4	5
Maximum Speed (m/s)	0,15	0,15
Maximun number of stops	8	8
Hourly insertions	45	45
Travel (mm)	24000	24000
Headroom (mm)	2000 ¹	2000 1
Pit (mm)	130	130
Maximum car's area (m²)	1,2	1,6
Lift power supply	battery	battery
Committed power (kW)	0,13	0,23
Inrush absorption from the network (A)	0,7	2
Mains power supply (V)	230	230
Maximum travels in case of blackout <sup>2</sup>	60	45
Recovery energy system	standard	standard
Anti Blackout System	standard	standard
SOL-ARE	optional	optional
2 The number of travels may year depending on the bettery charge		

<sup>&</sup>lt;sup>2</sup> The number of travels may vary depending on the battery charge.

<sup>1</sup> In case of opening H2000 at the highest floor, see tables below

Type of shaft	Min. headroom
Masonry	2100
Structure for outdoor	2300
Structure for indoor	2250

Plant configuration	Min. interfloor				
With doors on opposite sides and/or adjacent <sup>3</sup> (mm)	300				
With doors on the same side (mm)	H door frame + 100				

<sup>&</sup>lt;sup>3</sup> Plants with close planes at both ends are not feasible



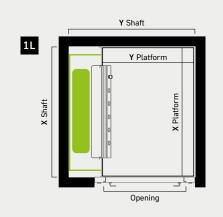


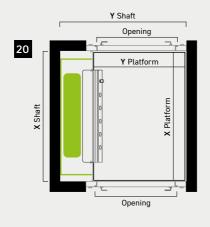
#### Technical specifications | MINIWATT | 43

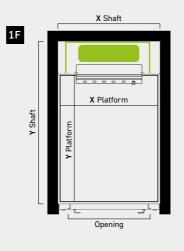
## **Standard**

	y			Platform	Existing shaft		Structure			
Load (kg)	People	Accessibility	X (mm)	Y (mm)	Opening (mm)	Access	X (mm)	Y (mm)	X (mm)	Y (mm)
300	4	Ė	1200	850	750	1L	1240	1190	-	-
300	4	Ė.	1200	900	750	1L	1240	1240³	1344	1344¹
300	4	Ė	1200	850	750	20	1240	1190	-	-
300	4	Ė	1200	900	750	20	1240	1240³	1344	1344¹
300	4	Ė	950	1200	750	1F <sup>4</sup>	990	1540	1094	1644
400	5	Ė	1200	1200	800	2A	1240	1540	1344	1644
400	5	Ė	1200	1200	800	3	1240	1540	1344	1644
350	4	١Ŀ	1300	950	800	1L	1340	1290	1444	13941
350	4	†Ł	1300	950	800	20	1340	1290	1444	1394¹
350	4	i ė	1000	1300	800	1F <sup>4</sup>	1040	1640	1144	1744
400	5	i.	1400	1100	900	1L	1440	1440	1544	1544¹
400	5	†Ł	1400	1100	900	20	1440	1440	1544	1544¹
400	5	١Ŀ	1100	1400	900	1F <sup>4</sup>	1140	1740	1244	1844

<sup>&</sup>lt;sup>1</sup> Technical cabinet on request/feasibility | <sup>2</sup> Add 40mm to Y shaft for technical cabinet side door | <sup>3</sup> Add 10mm to Y shaft for technical cabinet side door <sup>4</sup> Technical cabinet side door not available

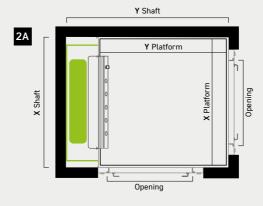


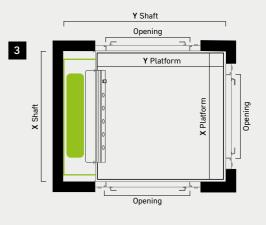




## The smallest

	(	Capacity	,	Platform			Existing	shaft	Structure shaft				
_	Load (kg)	People A	Accessibility	X (mm)	) Y (mm)	Opening (mm	) Access	X (mm)	Y (mm)	X (mm) only for indoor	Y (mm) only for indoor	X (mm) for outdoor & indoor	Y (mm) for outdoor & indoor
	150	2	Ť	680	580	500	1L	720	920	780	1000	824	1024
	150	2	Ť	680	580	500	20	720	920	780	1000	824	1024
	150	2	Ť	680	580	500	1F	920	720	780	1000	824	1024
	150	2	Ť	680	580	500	2A	720	920	-	-	-	-
	150	2	Ť	680	700	500	2A	-	-	780	1120	824	1144
	150	2	Ť	680	580	500	3	720	920	-	-	-	-
	150	2	Ť	680	700	500	3	-	-	780	1120	824	1144





## **Technical cabinet**



#### SWING DOOR SIDE

Finishes:

As per landing door

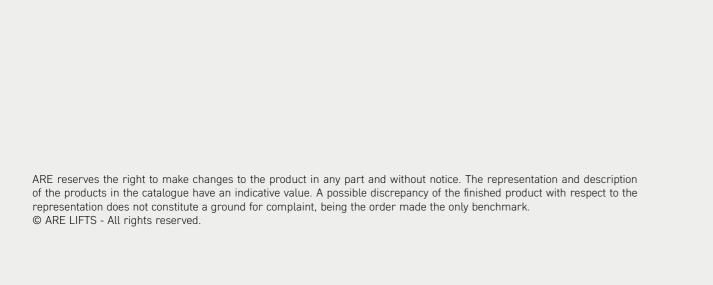


#### TO THE WALL H800



#### TO THE WALL H 2100





## WeAre



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