

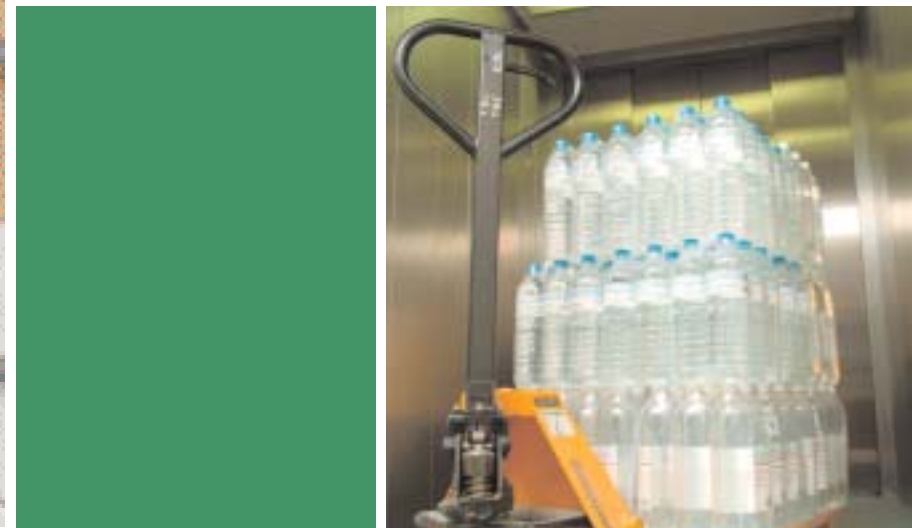
# KONE Arina™ 230

A KONE MonoSpace® Solution



*The space efficient goods elevator for public access environments*

- No machine-room
- Proven reliability
- Energy-efficient
- Durable design solutions
- Superior ride quality
- Flexible visual design
- Space-saving features
- Smooth, quiet ride
- Market leader
- Maximises available space
- Max. no. of stops: 7
- Max. travel: 23m
- Speed: 0.5m/s
- Load: 1000kg to 4000kg
- Fully compliant with all relevant regulations



## The 'green' elevator

The KONE Arina™ MonoSpace® platform is one of the most environmentally sound elevator concepts in the industry. Based on EcoDisc® technology, it incorporates KONE's commitment to re-use and recycle as many products and components as possible.



### Superior performance

2000kg	Hydraulic	KONE EcoDisc®
Speed (m/s)	0.6	0.5
Motor Power (kW)	28	5.4
Typical current values (Amp)		
• Starting Current	112 S/D	28
• Main Fuse size	63	3*25
Energy consumption (kWh p.a.)		
• 100 000 starts/year	10400	5800
Thermal losses (kW)	5.8	1.9
Oil contents (litres)	240	0
Noise (dBA)*	Typical 70	Less than 55
Machine room (m <sup>2</sup> )	6	No machine room

\* 1m distance from the machine

The **energy-efficient** KONE EcoDisc consumes approximately half the energy of conventional machines. Significant cost savings are also achieved through the use of low duty riser cables.

EcoDisc's **absence of oil** removes the risk of soil contamination and fire that are potential threats in hydraulic systems.

In order to promote sustainability, Life Cycle Management (LCM) is incorporated into the design of Arina elevators 'from birth to retirement'. LCM is an evaluation of the environmental impact of the product throughout its life. The result is a more **efficient design and use of materials**, transport, manufacture and safe disposal as well as avoiding other polluting factors wherever possible.

- **Absence of oil**
- **Energy-efficient**
- **95% recyclable**
- **Minimal noise and vibration levels**

## Quick and easy installation

The absence of a machine-room is not the only factor that speeds up the installation process of Arina™ elevators. Many other aspects of the KONE MonoSpace® platform contribute to more efficient and safer installation methods.

The modular design of the technologically advanced KONE MonoSpace platform allows smooth, efficient installation. The installation process was an integral part of product development to enable short construction times to be achieved.

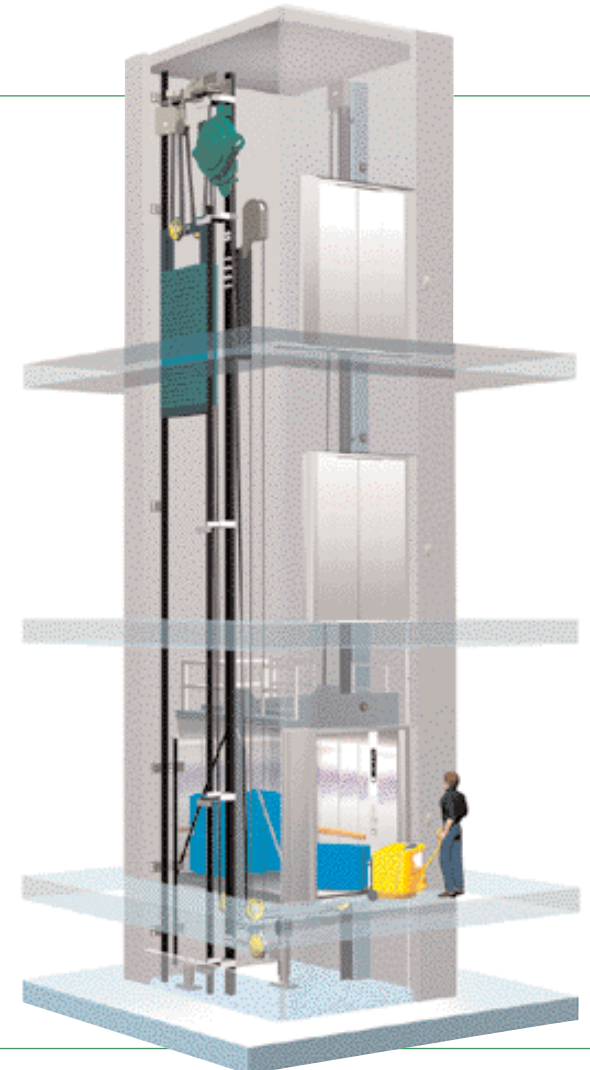
Convenient building layouts are possible due to a simplified top landing design. The controller is incorporated within the well, instead of the traditional top floor landing.

Installation efficiency is ensured by a unique scaffold-free installation system that offers an unrivalled degree of time-saving, safety and flexibility. It also minimises disruption to other trades, as most of the work is performed inside the well. State-of-the-art tools such as laser measurement ensure installation accuracy.

Efficient project management is a KONE commitment. A Project Supervisor will handle the co-ordination of the entire installation process from beginning to end, ensuring completion on time and within budget.



- Scaffold-free
- Minimal interface with other trades
- Lift well lighting and pit socket included
- No recesses required at landings
- No increased loads imposed at the top of the well by lift equipment
- Reduced power supply requirements





## Car Operating Panel

The Car Operating Panel includes all interfaces needed by the user:

- Call pushes
- Special function pushes or keys (e.g. alarm, door close, fan, priority switches)
- Emergency light
- Floor position indicator
- Informative messages (e.g. call locked, priority calls)
- Remote monitoring and two-way communication with KONE's service centre via a hands-free auto-dialler
- Voice announcer (if required)
- Interface for badge reader (if required)

The key button for a PIN code enables access to special control options (e.g. to give priority to VIP calls, temporary goods transportation etc.) and to control the operation of the optional fan.

The Quick Close Call option is an additional feature to the close doors button. To improve elevator performance, doors start to close immediately after a call button is pressed.

Alarm bell



For security reasons the control system can be set to stop the elevator at the main floor (where security personnel are located).

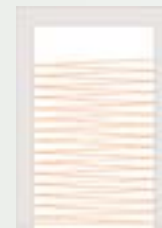


### Tough signalisation fixtures

The KONE elevator features operating fixtures that are built to last. The robust stainless steel car operating panel is flush with the wall surface to avoid being damaged during loading and unloading. Landing fixtures are steel-encased, and for greater visibility, landing call buttons are backlit.

### Extra-wide doors

In the Arina™ elevator, door width can equal car width, aiding loading and unloading of large, bulky items. The doors can be side or centre opening. Furthermore, the strong double-skin door panels are finished in stainless, zinc-coated or stove-enamelled steel, for extra durability.



### Curtain of light

For optimal door area protection, a curtain of light may be provided.

## Door performance options:

- Advanced door opening
- Nudging function, with buzzer sound and reduced speed of closing
- Adjustable door opening and closing times

*Other door and entrance finishes are available, please contact KONE for further details.*

## Walls



Linen Stainless Steel  
(M)

Quad Stainless Steel  
(K)

Brushed Stainless Steel  
(F)

Telegrey 4  
(RAL 7047)

Grey white  
(RAL 9002)

Ochre yellow  
(RAL 1024)

Pastel blue  
(RAL 5024)

Pale green  
(RAL 6021)

The aesthetic appearance of the KONE Arina 230 is consistent with that of all other KONE elevators. It is therefore easy to integrate a freight elevator with passenger elevators if desired.

You can choose any combination of these walls and floors. Alternatively, use other wall and floor materials and colours of your own choice, for a unique car design.

## Floors



Checkered plate  
Steel

Tear plate  
Stainless Steel

Tear plate  
Aluminium

Grey Rubber  
(RC1)

Green Rubber  
(RC2)

Studded Grey Rubber  
(RC5)

### Durable cars

Materials have been selected for their toughness. The floor can be rubber, aluminium, stainless steel or steel. Walls are stainless, zinc-coated or stove-enamelled steel. Buffer rails can be added for extra protection of the walls. Door sills are aluminium or stainless steel. The overall benefit is durability over a long lifetime.

Owing to differences in printing techniques, the colours represented may not exactly match the actual colours of the product described.

Please contact KONE for specific information.

## Elevator interior



### *Deep cars*

Cars can be provided up to a depth of 3400mm, making them ideal for handling large goods. An optional second car operating panel can be added for through-car applications.



Direct fluorescent lighting aids visibility for truck operators when manoeuvring into and out of the car.



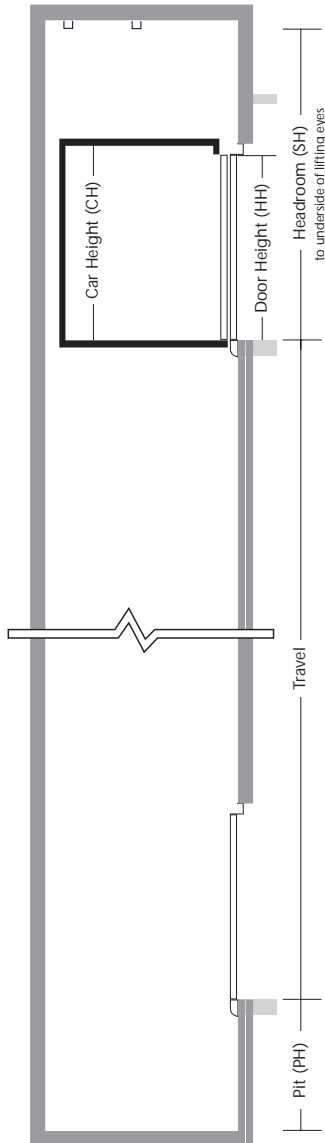
### *Easy loading and unloading*

KONE EcoDisc® technology ensures excellent ride comfort and levelling. An ultra-smooth ride protects fragile loads, and  $\pm 5$ mm levelling accuracy facilitates loading and unloading.

\*May vary depending on car size

# Planning Guide: 1000kg - 2000kg

## Headroom and Pit Dimensions

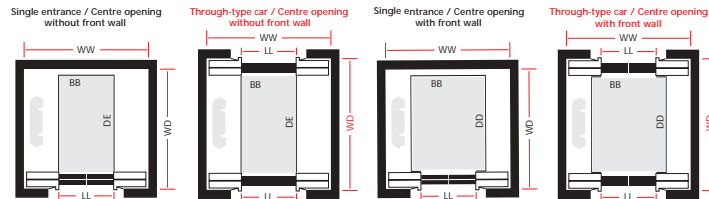


Car clear height (CH)	Headroom height (SH)	Door clear height (HH)
2100	3700	2000-2100
2200	3800	2000-2200
2300	3900	2000-2300
2400	4000	2000-2400

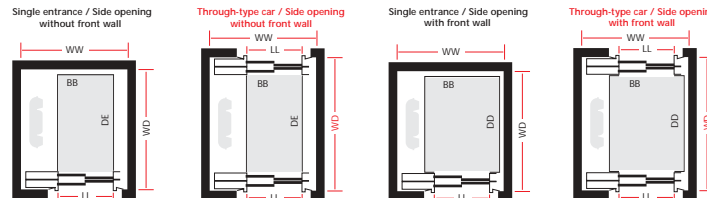
Available in 100mm increments

**Pit height (PH)**  
≤ 2000kg: Min. 1400mm

*Centre opening doors can open before the car has come to a standstill, and allow entry and exit before the doors are fully open.*



*Side opening doors can open before the car has come to a standstill, and allow entry and exit before the doors are fully open.*



- Certain options may require alternative dimensions.
- The dimensions and designs specified within this planning guide are examples of a selection of the KONE Arina™ range.
- Further details and alternative car sizes are available on request.

### Cars without front wall (values in red for through-type cars)

Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
13/1000	1300 x 1750	1300	2300 x 2250	2350 x 2250
13/1000	1100 x 2100	1100	-	2050 x 2500 (2650)
21/1600	1400 x 2400	1400	2400 x 2800 (2950)	2500 x 2800 (2950)
26/2000	1500 x 2700	1500	2500 x 3100 (3250)	-

### Cars with front wall (single entrance)

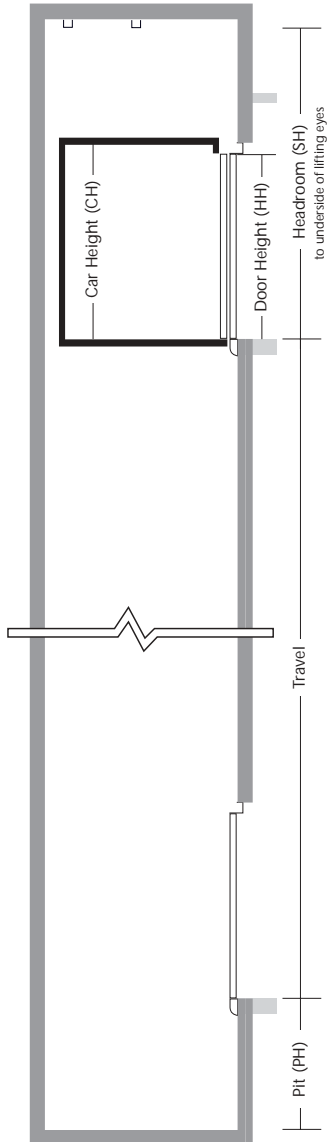
Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
17/1275	1200 x 2300	1100	-	2100 x 2750
21/1600	1400 x 2400	1300	2350 x 2850	2400 x 2850
26/2000	1500 x 2700	1300	2400 x 3150	2400 x 3150

### Cars with front wall (through-type: opposite entrances)

Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
17/1275	1200 x 2250	1100	-	2100 x 2950
21/1600	1400 x 2300	1300	2350 x 3000	2400 x 3000
26/2000	1500 x 2600	1300	2400 x 3300	2400 x 3300

# Planning Guide: 2500kg - 4000kg

## Headroom and Pit Dimensions

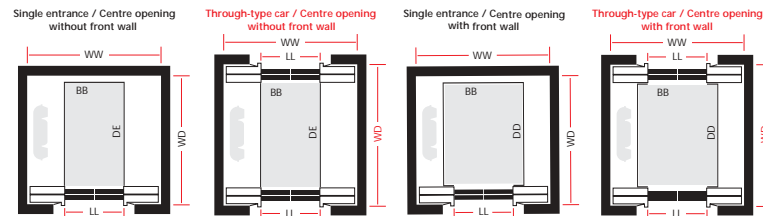


Car clear height (CH)	Headroom height (SH)	Door clear height (HH)
2100	4100	2000-2100
2200	4100	2000-2200
2300	4100	2000-2300
2400	4100	2000-2400

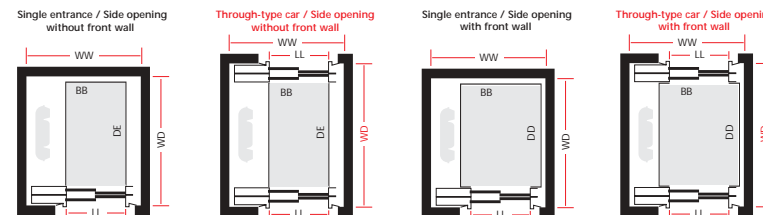
Available in 100mm increments

**Pit height (PH)**  
 > 2000 & < 3500kg: Min. 1400mm    ≥ 3500kg: Min. 1750mm

*Centre opening doors can open before the car has come to a standstill, and allow entry and exit before the doors are fully open.*



*Side opening doors can open before the car has come to a standstill, and allow entry and exit before the doors are fully open.*



- Certain options may require alternative dimensions.
- The dimensions and designs specified within this planning guide are examples of a selection of the KONE Arina™ range.
- Further details and alternative car sizes are available on request.

### Cars without front wall (values in red for through-type cars)

Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
33/2500	1800 x 2700	1800	3050 x 3100 (3250)	-
46/3500	2100 x 3000	2100	3350 x 3400 (3550)	-
53/4000	2100 x 3400	2100	3350 x 3800 (3950)	-

### Cars with front wall (single entrance)

Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
33/2500	1800 x 2700	1300	3000 x 3150	3000 x 3150
33/2500	1800 x 2700	1400	3000 x 3150	3000 x 3150
33/2500	1800 x 2650	1700	3000 x 3100	-
46/3500	2100 x 3000	1800	3250 x 3450	-
53/4000	2100 x 3400	1800	3250 x 3850	-

### Cars with front wall (through-type: opposite entrances)

Persons load kg	Car Size BB x DD (mm)	LL (mm)	Centre opening door Well Size (mm) WW x WD	Side opening door Well Size (mm) WW x WD
33/2500	1800 x 2600	1300	3000 x 3300	3000 x 3300
33/2500	1800 x 2600	1400	3000 x 3300	3000 x 3300
33/2500	1800 x 2550	1700	3000 x 3250	-
46/3500	2100 x 2950	1800	3250 x 3650	-
53/4000	2100 x 3300	1800	3250 x 4000	-