



SYNERGY 100

Pure and efficient. The ideal
elevator for functional
residential buildings



PURE AND EFFICIENT FOR RESIDENTIAL BUILDINGS



synergy 100 is the ideal solution if you are looking for a durable, energy-efficient and compact elevator for a new residential building with low traffic flows and basic needs.

synergy 100 proves that sleek design and a comfortable ride can be affordable. This compact elevator features durable materials that increase efficiency and working life. synergy 100 offers optimised shaft dimensions with the option of reduced pit and overhead spaces. All these attributes make synergy 100 perfect for residential buildings with low traffic flows.

Choose synergy 100 and trust in TK Elevators's expertise. Our excellent service ensures maximum availability and adds value to residential projects by ensuring optimum functionality for longer, resulting in increased user satisfaction.

OVERVIEW SYNERGY 100

Elevator type	Machine room-less, optional machine room
Load	450 / 630 / 1,000 kg
Speed	1.0 m/s
Travel height	Up to 45 m
Number of stops	Up to 12 stops
Cabin	6 predesigned cabins
Door types	Side-opening or central opening with 2 panels
Door opening width	800 mm or 900 mm
Door height	2,000 mm or 2,100 mm



CONTENTS

1	synergy 100 product brochure	15	Series 30 operating panels
2	Introduction	17	Selected features and options
4	Benefits at a glance	18	Planning
6	Performance and safety	19	Shaft layout
7	Passenger comfort	20	Door options
8	Energy efficiency	21	Dimensions chart
10	Cabin Design	22	About TK Elevator
13	Series 50 operating panels	23	Imprint / Disclaimer

Our product portfolio



synergy 100

Pure and efficient. The ideal lift for functional residential buildings. Timeless design, quality components and outstanding price-performance ratio.



synergy 200

Flexible and versatile. Our elevator with the broadest application possibilities, ranging from residential to commercial buildings with up to 20 stops.



evolution 200

The high-performance elevator of choice for mid-rise commercial buildings that require up to 100 m travel height and maximum reliability.



evolution 300

Powerful and customisable. Ideal for mid- to high-traffic commercial buildings with heavy-duty performance and custom-fit design requirements.

The easy solution that meets all your mobility needs



Best-in-class shaft efficiency

Whether you choose standard dimensions for overhead and pit or a version with reduced dimensions – synergy 100 is best-in-class.



Low energy consumption

synergy 100 offers several standard features that keep energy costs in the green range, such as LED lighting, automatic stand-by operation and its efficient, gearless machine. synergy achieved an A class for energy-efficiency rating.



Good investment

Excellent cost-performance ratio throughout the product life cycle. Durable materials and proven components for longevity, supported by our skilled installation and outstanding service to ensure a longer working life.

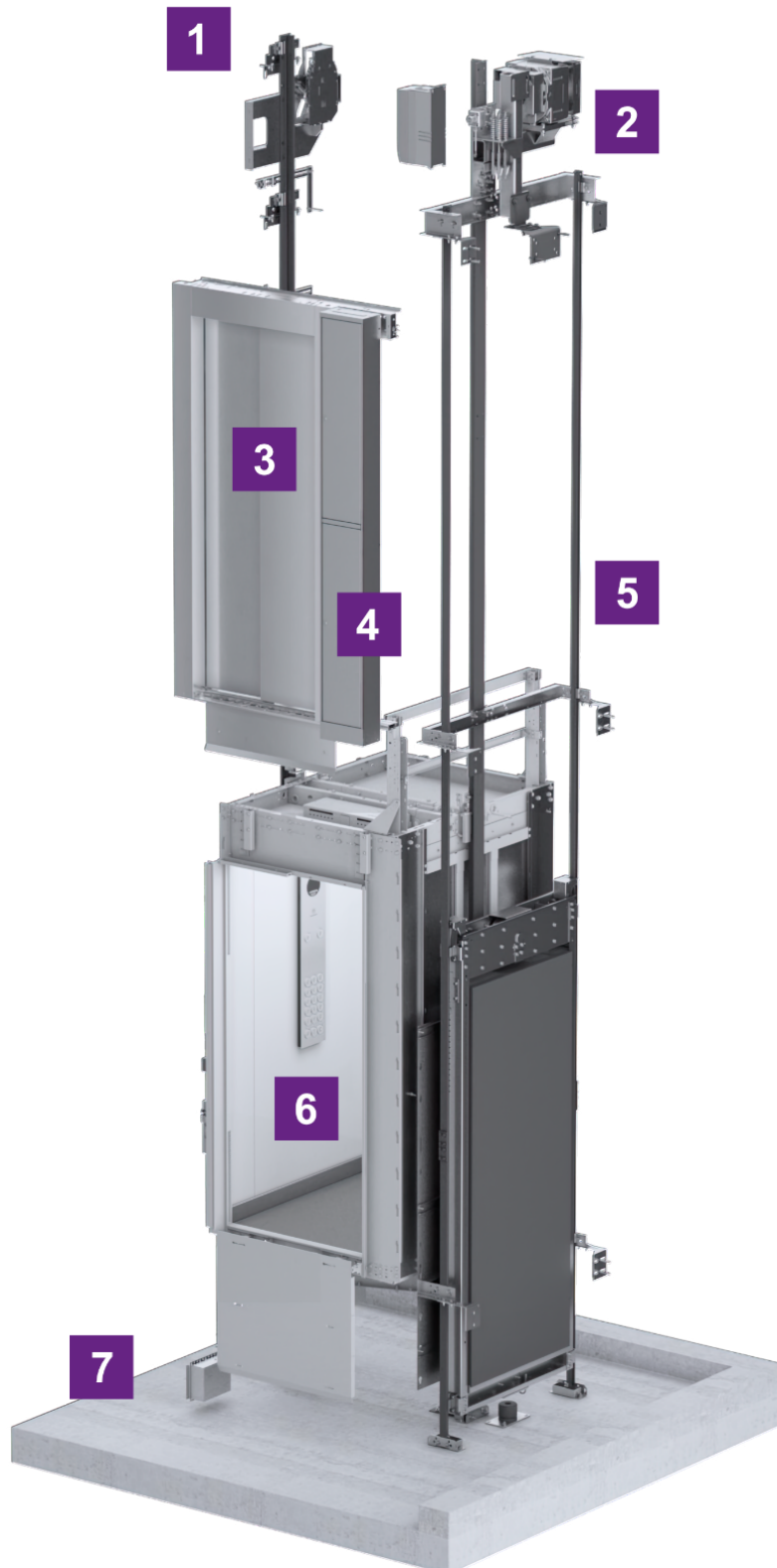


Our long history of engineering experience

Our experience guarantees reliability, and enhanced safety, thanks to strict internal safety standards.



One elevator. Many benefits.



1. Reduced overhead dimensions
2. Efficient gearless machine for low energy consumption
3. Reliable doors with safe operation
4. Intelligent, low-energy controller
5. Fast and safe scaffoldless installation process
6. Functional cabin design with durable skinplate finishes or timeless stainless steel walls
7. Reduced pit dimensions

Performance

Delivering cost-effective performance that perfectly matches the needs of residential buildings.



A proven solution

More than 90,000 units of the synergy family have already been delivered worldwide.



Proven components

synergy 100 is manufactured using proven components that guarantee reliable performance.



Gearless machine

High performance and quality ensure smooth operation and a long and reliable working life.



Made in Europe

At our elevator manufacturing centers in Germany and Spain.

Safety & regulations



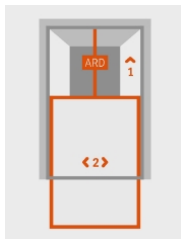
Elevators are the safest means of transport

All safety elements are manufactured to meet all relevant industry standards and regulations, including our company's own strict internal Safety, Health and Environment standards, as well as meeting ISO 9001 and 14001.



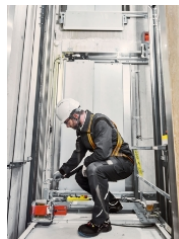
Stay connected 24/7

Whenever you need it, the communication system is there for you, keeping you connected with our 24hr call center.



Emergency evacuation

In the event of a power failure, every synergy 100 can perform a required rescue operation on its own. The Automatic Rescue Device (ARD) will safely take you (load dependent) to the next floor [1] and open the doors to allow passengers to exit the elevator cabin [2].



Highest standards

We design and test to the highest standards and manufacture our own safety components. Our service concept is built on the basis of ensuring maximum passenger comfort, convenience and safety at all times while protecting the long-term value of your investment.

Comfort

More than a pleasant ride.



Silent and low-vibration

synergy 100 is best-in-class within its segment. The controller avoids unnecessary trips and reduces waiting times.



Accessibility

Cabin and door dimensions, the safety mirror, the handrails design, luminance contrast in fixtures, adjustable sound level, as well as voice announcements meet the accessibility requirements of EN 81-70.



Landing accuracy

Landing accuracy of +/- 3 mm ensures safe and comfortable access for passengers.



Easy-to-use push-buttons

With Braille lettering and green frame for the main floor button (COP).

Energy efficiency

Sustainability is part of our corporate strategy. It involves the holistic improvement of our products and processes to help you reduce the environmental footprint of your buildings and qualify for LEED[®] and BREEAM[®] certification by incorporating green features in our elevators. The low energy consumption reduces the CO₂ footprint of the elevator during operation and consequently its share of the overall energy consumption of a building. This has also been proven by synergy's life cycle assessment.

Learn more about TK Elevator's
ESG efforts



www.tkelevator.com/global-en/sustainability



Low energy consumption

thanks to the highly efficient gearless machine with no contaminant lubricants.



Energy-saving

Standby mode (standard): cabin lighting comes with automatic switch-off. Sleep mode (optional): The electronic components are turned off when the elevator is in sleep mode and are instantly activated when the elevator is called.



100% LED

LED lighting is standard for all lighting devices in shaft, cabin (ceilings, push- buttons, etc.) and landings. LED lighting can last 10 times longer and is up to 80 % more energy efficient than halogen lighting.



Class A rating

Measurements taken on a standard synergy configuration with sleep mode achieve the highest energy efficiency rating Class A according to ISO 25745-2, based on a 630 kg elevator at 1 m/s with 12 m travel height and usage category 1.

Environmental Product Declaration

synergy 100 has a certified Environmental Product Declaration giving information about the environmental performance and contents, which has been controlled and verified according to the requirements of the International EPD[®] System. Registration number: S-P-01639. More information is available at environdec.com

**synergy 100 Environmental
Product Declaration**



www.environdec.com/library/epd1639



Cabin Design

The C design line for synergy 100 combines timeless, clean cabin designs with attractive and durable materials. The long-lasting finishes are the ideal choice for functional buildings.

Compose your favourite C design
line cabin



c-design-synergy.tkelevator.com



Predesigned cabins

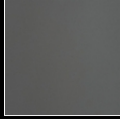
Choose between full stainless steel [ST] or a coated steel skinplate [SK] in the stylish unicoloured predesigned cabins.



Skinplate



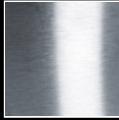
C20-SK01



C21-SK04



C22-SK04



C23-SK07

Stainless steel



C30-ST01



C32-ST02

Cabin C30 ST01 Stainless steel brushed walls, Moon COP in stainless steel with 3.5" display, LED plate ceiling, Concrete Dark Grey vinyl floor, aluminium silver skirting

Ceilings

The white painted ceiling enhances the reflection of light from the slim LED panel light to provide comfortable, uniform lighting. Two vandal-resistant ceilings are available.



LED Plate (standard)



Steel Grille, vandal resistant



Steel Lightbox, vandal resistant

Handrails

The standard handrail is a robust oval tube in chrome-plated aluminum with curved ending. Optional: round satin stainless steel handrail with curved ending.



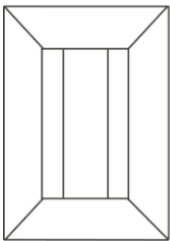
Chrome-plated aluminum



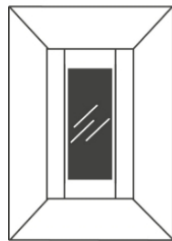
Stainless steel satin silver handrail

Mirrors

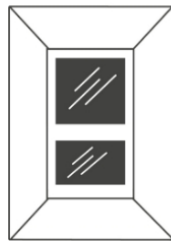
A mirror in 4 mm tempered safety glass is included on the rear wall, or on the side wall for elevators with a double entrance. Mirrors make the cabin feel more spacious and create appealing ceiling light reflections.



Without mirror



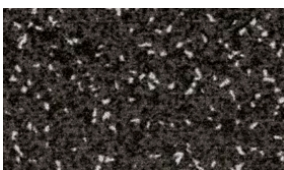
Partial width / partial height



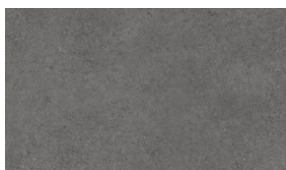
Double entrance side wall

Floors

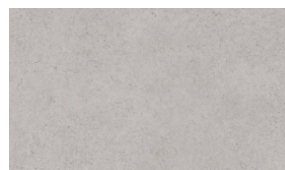
Hardwearing, easy-to-clean vinyl in a choice of three colours. You also have the possibility to supply your own flooring (recess ≤ 25 mm).



Nature black



Concrete dark grey



Concrete light grey



own flooring (recess ≤ 25 mm)

Series 50 operating panels and indicators

Cabin Operating Panels (COP)

With its minimalist design, the Moon operating panel perfectly combines functionality and quality. It is available in stainless steel (standard) or white tempered glass with a 3.5" display. The vandal-resistant option features the VB push-button series. Optionally, a second vertical or horizontal COP can be installed.



Moon / stainless steel,
210×1000×30 mm



Moon / safety glass,
210×1000×30 mm



Steel Moon / vandal-resistant,
210×1000×30 mm



XL horizontal / stainless steel,
350×164×92 mm

Second vertical or horizontal COP



XL horizontal + Moon COP



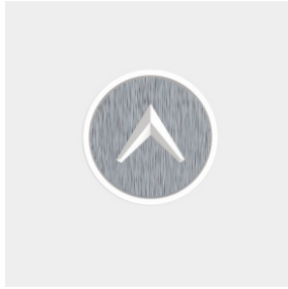
Second Moon COP side-opening
door L2



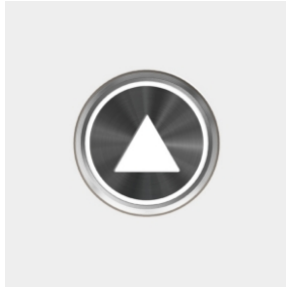
Second Steel Moon COP central-
opening door C2

Push-buttons

Standard DB button series with stainless steel faceplate and Braille lettering, main floor green frame and round white confirmation lighting. Optionally, VB and XL push-buttons are available for vandal-resistant and horizontal COP accordingly. All series conform with the new EN 81-70 regulation.



DB02 push-button, stainless steel silver



VB02 push-button, stainless steel black



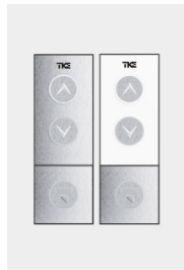
XL push-button, coated steel, matt white

Landing Operating Panels (LOP)

Contemporary styling for landing signalling in white safety glass or stainless steel. With optional TFT 3.5" display and/or extra keyswitch.



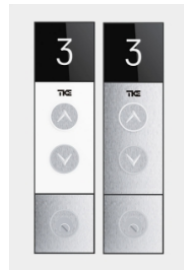
LOP 51 / 91x171x25 mm



LOP 52 / 91x261x25 mm



LOP 53 / 91x261x25 mm



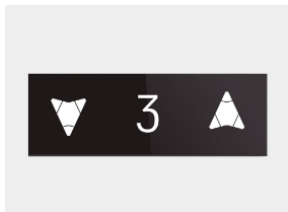
LOP 50 / 91x350x25 mm



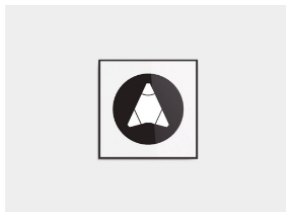
Vandal resistant LOP 51/52

Landing Indicator Panels

Achieve a modern and neutral look with a black glass face plate. Or select the most functional option with the arrow integrated in the cabin portal.



LIP 50 / 261x91x21 mm



LDIP 50-51 / 91x101x21 mm



LIDC 31 (40x120x2 mm)

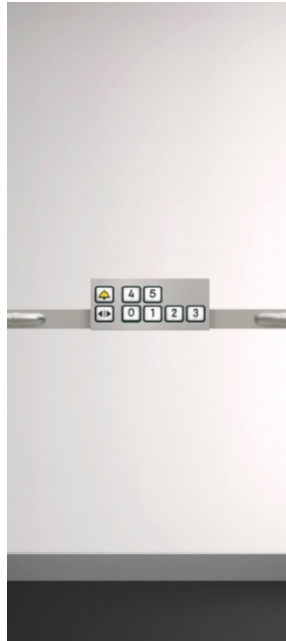
Series 30 operating panels and indicators

Cabin Operating Panels (COP)

The Light Moon operating panel perfectly combines functionality and quality. Optionally, a second vertical or horizontal COP can be installed.



Light Moon / stainless steel,
189×950×31 mm



XL horizontal / stainless steel,
350×164×92 mm

Landing Operating Panels (LOP)

Thanks to their slim design, series 30 fixtures are particularly suitable for narrow landing door jambs.



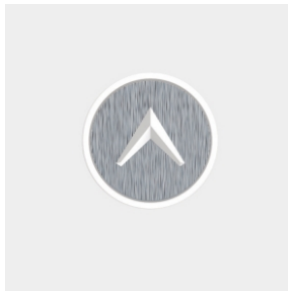
LOP 31 buttons / 67×160×21 mm



LOP 31 keyswitch / 67×160×21 mm

Push-buttons

Standard DB button series with stainless steel faceplate and round white confirmation lighting. XL push-buttons are available for XL horizontal COP accordingly.



DB02 push-button, stainless steel silver



XL push-button, coated steel, matt white

Landing Indicator Panels



LID 31 / 65x160x21 mm



LIDC 31 (40x120x2 mm)

Selected features and options

- Standard
- Option

COMFORT

Accessibility

Door open/close and alarm push-button	●
Big push-buttons with Braille lettering (COP)	●
Round green frame in main floor push-button	●
Adjustable sound level (35-65 dBA)	●
Luminance contrast in fixtures	●
Induction loop for hearing-impaired passengers	○
XL horizontal COP with XL push-buttons	○

Access Control

Cancellation calls by double click in COP	○
Key and Eurokey switch in COP/LOP for access/functions	○
Encoded car calls (ECC)	○
Preference / Independent service of COP	○
Out of service LOP	○
Prepared for card reader LOP/COP	○

Others

Car ventilation fan	○
CCTV multimedia travelling cable	○

SAFETY & REGULATIONS

Light curtain protection	●
Emergency lighting in cabin 3 h	●
Automatic evacuation to next landing	●
Automatic evacuation to any landing	○
Two-/three-way intercom	○
Safety gear on counterweight	○
Water pit sensor	○
Halogen-free shaft wiring (except for the motor and travelling cable)	●
Doors fire rating E-120	●
Doors fire rating EI-60	○
EN 81-20/50, Lifts construction and comp. testing	●
EN 81-28, Emergency call system	●
EN 81-70, Accessibility to lifts	○
EN 81-71, Vandal-resistant, partially Category 1	○
EN 81-73, Fire evacuation	○
EN 81-77, Seismic, Category 0	●
EN 81-77, Seismic, Category 1, 2, 3	○

PERFORMANCE

Parking level in main landing floor	○
Building management system (BMS)	○
Extended Building Management System (BMS)	○

Layout

Reduced overhead	○
Reduced and extra-reduced pit	○
Machine room	○

ENERGY EFFICIENCY

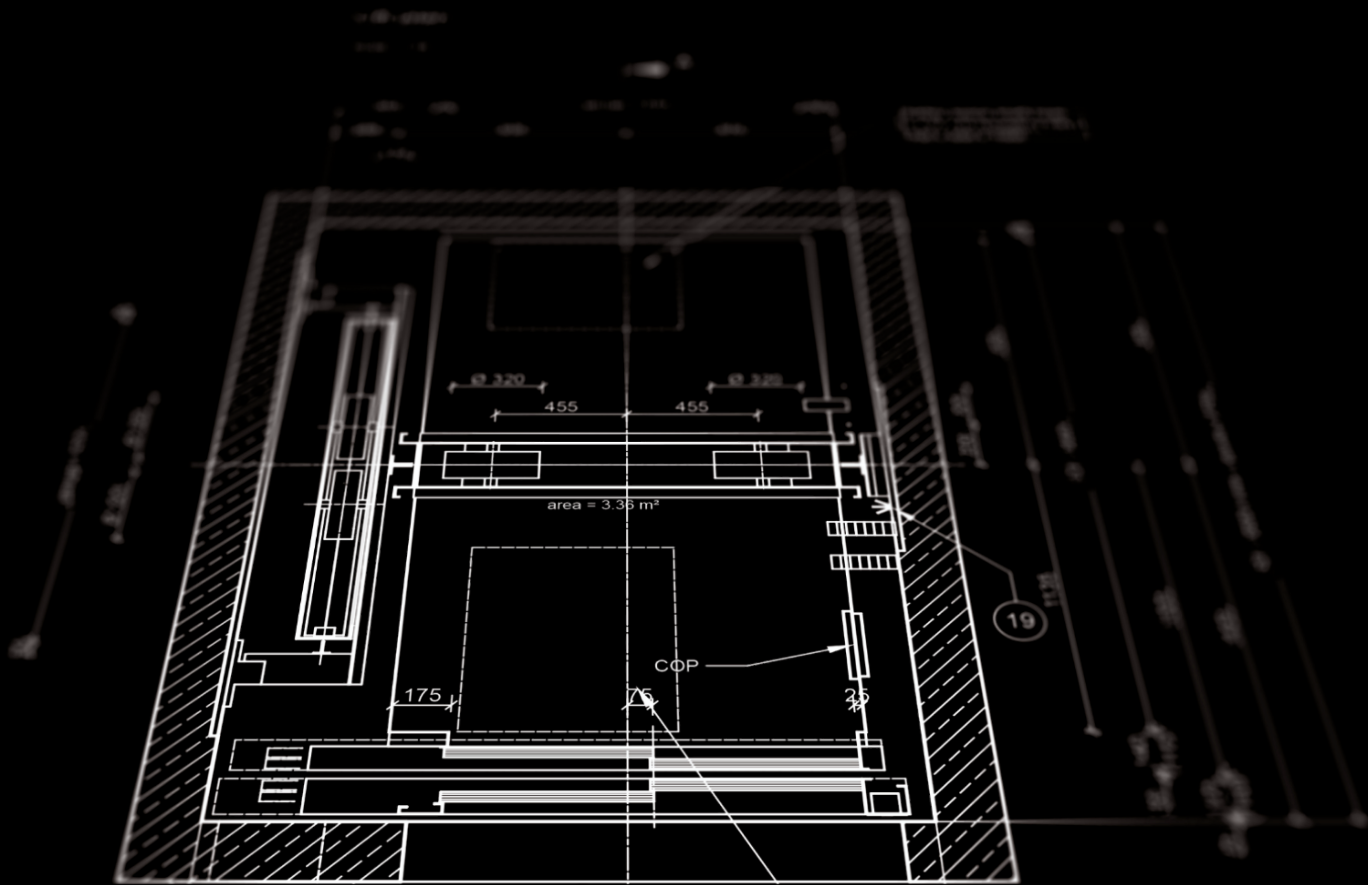
Energy-saving cabin LED lighting	●
Energy-saving shaft LED lighting	●
Cabin lighting stand-by	●
Sleep mode	○

DESIGN

Predesigned cabins	●
Vandal-resistant false ceiling	○
Preparation for own custom flooring ≤ 25 mm	○
Stainless steel COP/LOP	●
Glass faceplate COP/LOP	○
Vandal-resistant COP / LOP	○
Double vertical / horizontal COP	○
Vandal-resistant push-buttons	○
TFT 3.5" display in COP, functions/direction	●
TFT 3.5" display in LOP, functions/direction	○
LIDC Landing arrow indicator in car portal	○
Series 50 LOP, LIP and LDIP surface-mounted on door frame or wall	○
Series 30 slim LOP and LID, surface-mounted on door frame or wall	○
Selectable controller cabinet position	○
Landing doors prime coated in RAL 7032	●
Landing doors in ferritic stainless steel (AISI 441)	○
Landing doors in stainless steel linen	○
Cabin doors in ferritic stainless steel (AISI 441)	●
Cabin doors in stainless steel linen	○

To discover all options available for synergy 100, please contact your local TK Elevator sales representative. The details quoted here can only be viewed as binding when confirmed expressly in writing.

PLANNING



synergy online in-planner tool

Make the most of your building space and find the optimal dimensions for your new synergy 100 cabin – or the best-fitting cabin for your planned shaft dimensions



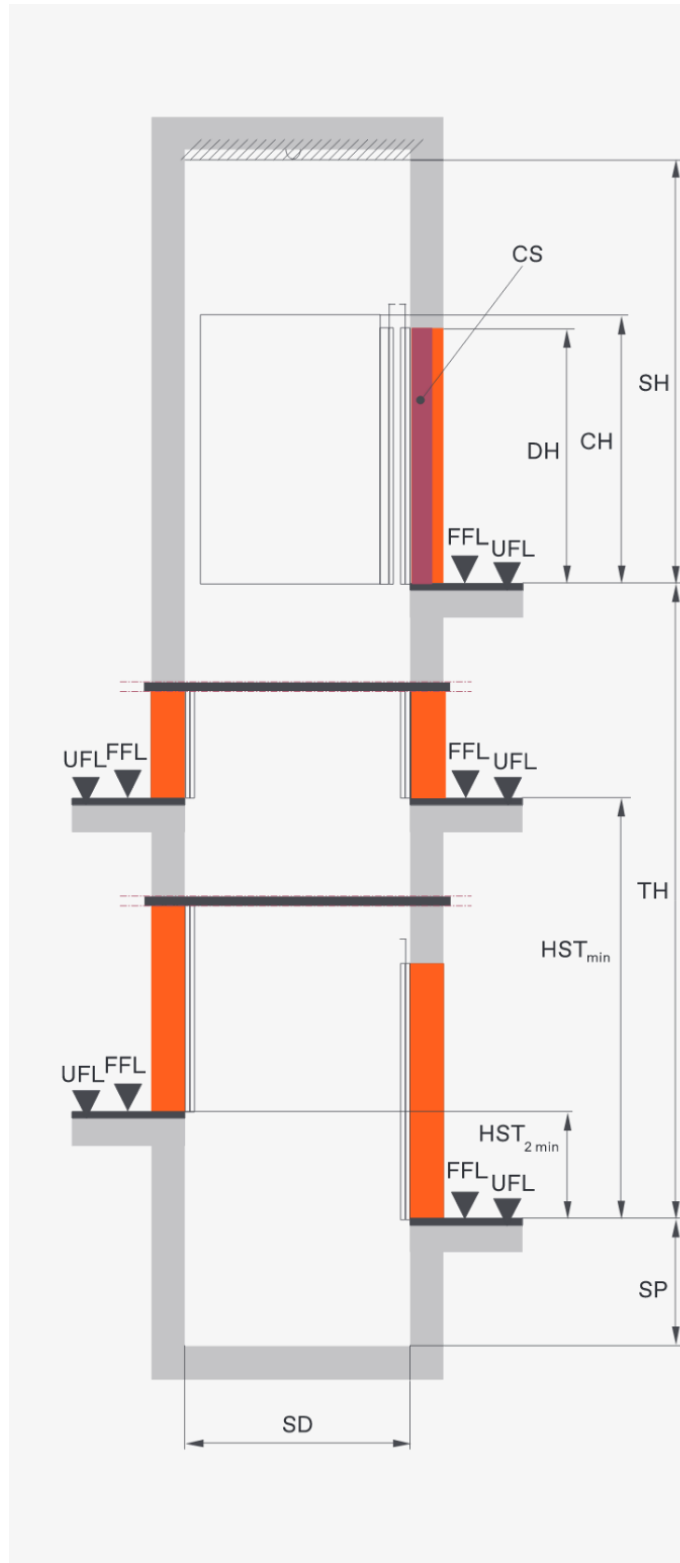
Shaft layout

Values

SD	see dimension page
SH	standard = 3400 mm / reduced from CH + 490 mm
SP	standard from 1000 mm / reduced 425 / 550 mm
TH	max. 45 m (30 m with reduced pit and/or overhead) / min. 2900 mm
HST	min. DH + 450 - 510 mm (consult conditions)
HST₂	min. 250 mm
CH	2070 / 2200 mm
DH	2000 / 2100 mm

Key

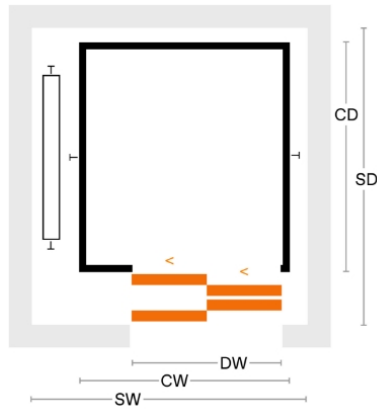
SD	shaft depth
SH	shaft head
SP	shaft pit
TH	travel height
HST	min. height between floors
CH	cabin height
DH	door height
CS	controller system
FFL	finished floor level
UFL	unfinished floor level



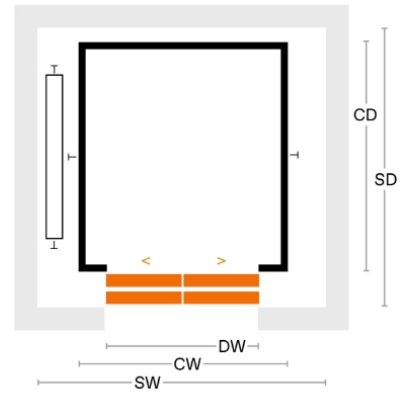
Door options

Key

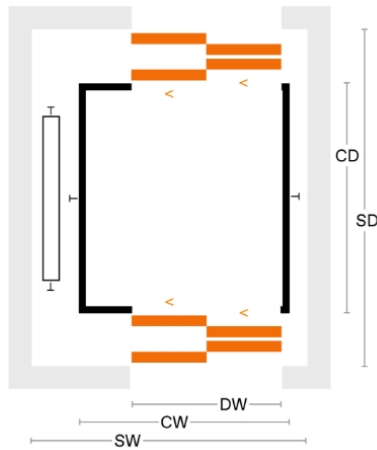
L2	2-panel side-opening door
C2	2-panel central-opening door
S	single entrance
D	double entrance
SW	shaft width
DW	door width
CW	cabin width
CD	cabin depth
SD	shaft depth



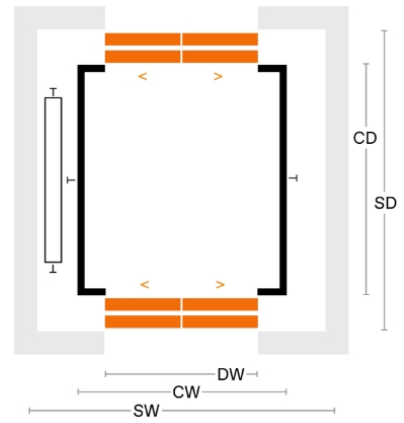
L2 - S



C2 - S



L2 - D



C2 - D

Dimensions

SYSTEM				CABIN		DOOR				SHAFT							
Rated load	Passengers	Speed	Travel height max.	Width x Depth	Height	Entrance type	Door type	Width	Height	Width	Width full front	Depth door in recess	Depth full front	Depth door partially in shaft	Depth door in shaft	Shaft pit	Shaft head
kg		m/s	mm	mm	mm			mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
450	6	1.0	45	1000 × 1250	2200	S/D	L2/C2	800-900	2000-2100								
450	6	1.0	45	1000 × 1250	2200	S	L2	800	2000	1495	1505	1540	1540	1610	1665	1000	3400
450	6	1.0	45	1000 × 1250	2200	S	L2	900	2000	1595	1600	1540	1540	1610	1665	1000	3400
450	6	1.0	45	1000 × 1250	2200	D	L2	800	2000	1495	1505	1680	1680	1830	1930	1000	3400
450	6	1.0	45	1000 × 1250	2200	D	L2	900	2000	1595	1600	1680	1680	1830	1930	1000	3400
450	6	1.0	45	1000 × 1250	2200	S	C2	800	2000	1780	-	1505	-	1545	1595	1000	3400
450	6	1.0	45	1000 × 1250	2200	D	C2	800	2000	1780	-	1610	-	1700	1790	1000	3400
450	6	1.0	45	1000 × 1300	2200	S/D	L2/C2	800-900	2000-2100								
450	6	1.0	45	1000 × 1300	2200	S	L2	800	2000	1495	1505	1590	1590	1660	1715	1000	3400
450	6	1.0	45	1000 × 1300	2200	S	L2	900	2000	1595	1600	1590	1590	1660	1715	1000	3400
450	6	1.0	45	1000 × 1300	2200	D	L2	800	2000	1495	1505	1730	1730	1880	1980	1000	3400
450	6	1.0	45	1000 × 1300	2200	D	L2	900	2000	1595	1600	1730	1730	1880	1980	1000	3400
450	6	1.0	45	1000 × 1300	2200	S	C2	800	2000	1780	-	1555	-	1595	1645	1000	3400
450	6	1.0	45	1000 × 1300	2200	D	C2	800	2000	1780	-	1660	-	1750	1840	1000	3400
630	8	1.0	45	1100 × 1400	2200	S/D	L2/C2	800-900	2000-2100								
630	8	1.0	45	1100 × 1400	2200	S	L2	800	2000	1595	-	1690	-	1760	1815	1000	3400
630	8	1.0	45	1100 × 1400	2200	S	L2	900	2000	1595	1605	1690	1690	1760	1815	1000	3400
630	8	1.0	45	1100 × 1400	2200	D	L2	800	2000	1595	-	1830	-	1980	2080	1000	3400
630	8	1.0	45	1100 × 1400	2200	D	L2	900	2000	1595	1605	1830	1830	1980	2080	1000	3400
630	8	1.0	45	1100 × 1400	2200	S	C2	800	2000	1795	-	1655	-	1695	1745	1000	3400
630	8	1.0	45	1100 × 1400	2200	S	C2	900	2000	1980	-	1655	-	1695	1745	1000	3400
630	8	1.0	45	1100 × 1400	2200	D	C2	800	2000	1795	-	1760	-	1850	1940	1000	3400
630	8	1.0	45	1100 × 1400	2200	D	C2	900	2000	1980	-	1760	-	1850	1940	1000	3400
1000	13	1.0	45	1100 × 2100	2200	S/D	L2/C2	800-900	2000-2100								
1000	13	1.0	45	1100 × 2100	2200	S	L2	900	2000	1600	1610	2390	2390	2460	2515	1000	3400
1000	13	1.0	45	1100 × 2100	2200	D	L2	900	2000	1600	1610	2530	2530	2680	2780	1000	3400
1000	13	1.0	45	1100 × 2100	2200	S	C2	900	2000	1980	-	2355	-	2395	2445	1000	3400
1000	13	1.0	45	1100 × 2100	2200	D	C2	900	2000	1980	-	2460	-	2550	2640	1000	3400

Please note: The values shown correspond to a generic installation. Please contact your TK Elevator sales representative for guaranteed shaft dimensions for specific projects, especially for reduced shaft head and/or pit. During the planning phase, all applicable regulations stipulated by relevant notified bodies and all applicable national regulations should also be considered. **Key:** S: Single entrance, D: Double entrance, L2: Side-opening door with 2 panels, C2: Central-opening door with 2 panels **Reduced SP or SH:** Optional reduced SP = 425/550 mm and reduced SH = CH+490 mm, for CH=2070 mm and self supporting cabin at 1 m/s.

ABOUT TK ELEVATOR

We are elevator people. Striving to move the world. Known for a passion for technology with service at the heart at our business.

Over the past decades, TK Elevator has established itself as one of the world's leading elevator companies and became independent after its sale by thyssenkrupp AG in August 2020. To our customers in over 100 countries we provide an extensive service network that guarantees close proximity, with more than 1,000 locations and over 50,000 employees.

TK Elevator's most important business line is our manufacturer-independent service for mobility solutions represented by over 24,000 service technicians.

Our new installation product portfolio ranges from commodity elevators for residential and commercial buildings to cutting-edge, highly customised solutions for state-of-the-art skyscrapers. What's more, it also consists of escalators and moving walks, passenger boarding bridges, stair and platform lifts. Integrated cloud-based service solutions, such as the MAX platform, are gaining in importance. These digital offerings mean there are no longer any limits to urban mobility.

TK Elevator – move beyond

50,000+



We are a team of over 50,000 colleagues

 24,000+

With more than 24,000 best-trained technicians

 100+

We serve customers in over 100 countries

 1,000+

From more than 1,000 locations worldwide



TKELEVATOR.COM

TK Elevator Europe Africa GmbH
E-Plus-Strasse 1
40472 Düsseldorf
Germany
info@tkelevator.com

synergy 100 en-EA v08/06/2022

The details quoted in this brochure can only be viewed as binding when confirmed expressly in writing. Reproduction and storage only with authorization of TK Elevator. Colours, options and specifications are subject to change. All cabin design options illustrated in this brochure are for illustrative purposes only. The samples shown may vary from the original in colour and material. Patterned samples are not to scale. Your TK Elevator contact will gladly provide you with real material samples.