

S+

ISI 2040®

THE  
ELEVATOR

SCHMITT+SOHN ELEVATORS

# S+



ISI 2040<sup>®</sup> THE ELEVATOR  
DESIGN THE FUTURE  
SPARK INSPIRATION

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# WELCOME

It gives us great pleasure, and not a little pride, to present to you our product brochure ISI 2040®. An internationally award-winning product, borne from the passion of 1,900 dedicated employees. For customers who place the highest demands on quality, and are looking for long-lasting partnerships. A product that stands out from planning to service, and that has set international standards for its impressive technology and excellent design. A product with experience which you will appreciate.

We are a family company, and we have been planning, building and servicing elevators for over 100 years. From the conviction of first-class and sustainable products. Like the ISI 2040®. We develop outstanding products by concentrating on the essentials, such as functionality and design quality. The economy of the ISI 2040® is based not only on the outstanding concept of simplified planning and personal project management.

The high-quality materials and the ingenious design of ambitious details solutions ensure the maintenance of value, making it unique in its price class. Combined with the excellent service, it stands for the high availability of every Schmitt+Sohn elevator. We and all of our employees stand for these values, which grow from the commitment of a family-managed company with centuries of experience and a sense of responsibility for our workforce, customers and partners. Look, read and discover.

Welcome to Schmitt+Sohn.

Maximilian Schmitt  
Managing partner





# OUR KEY PERFORMANCE INDICATORS

Schmitt+Sohn at a glance – the key performance indicators of a successful company

1861	6	18	4
Foundation of the company. A long tradition in elevator construction and service begins.	generations of experience. The company family remains a constant.	domestic and foreign companies. Decentralised, and always close by.	countries in Europe. We maintain locations in: Germany, Portugal, Austria, and the Czech Republic.
2,100	100,000	1,900	9001
systems produced annually. Production in our own plants.	elevator systems built. Our reference customers are distributed throughout Europe.	employees. Success has many faces. 118 apprentices are included in this number.	standard quality. Improving. Developing. Looking ahead.
24	50,000	180	0
-hour on-call readiness 365 days per year. Always there for you.	systems to be serviced annually. Competence you can rely on.	million euros in turnover. Convincing results.	bank liabilities. Independence for strong partnerships.

### Our Values

Ongoing learning: That is what our 1,900 passionate employees, who contribute their expertise and abilities every day, stand for.

Quality: Continuous development and improvement of our processes and products, for example in production. Each year, 2,100 new systems leave our company with a consistently high level of quality.

Corporate reliability: The foundation of long-lasting relationships to our customers and our employees. This is a value we have been focused on for over 160 years.

### Our products

We develop outstanding products that meet high technical and aesthetic requirements. They are created through a dialog between architecture, design, and technology. This is part of our self-conviction as a company. A systematic approach, functionality, and the quality of painstaking workmanship down to the last detail are part of our commitment to meaningful development and design. Human mobility is our mission.

### Our service

We provide you access to a service manager to support you for the entire time your elevators are in service. This is a big responsibility, as we service over 50,000 systems each year. Thanks to a decentralized network, we are always nearby to ensure you receive the support you need. Reliability is our top priority: our services are available to you 24 hours a day, 365 days a year - with no waiting time, for successful, long-term partnership.



View our corporate film here.

# ISI 2040<sup>®</sup>

## THE ELEVATOR



# ISI 2040® THE ELEVATOR

AN INTERNATIONALLY  
AWARD-WINNING  
SERIES PRODUCT,  
FOR SOPHISTICATED  
ARCHITECTURE.

## **ISI 2040® The elevator**

Developed from our commitment to good construction and timeless values.

The ISI 2040® fulfills the highest standards. Thanks to its high-quality series equipment and carefully coordinated accessories, it is uniquely suited for use in all areas.

## **ISI 2040® Design**

We consider a passenger elevator to be not only a means of transport, but of communication as well: ISI 2040® is the result of an intensive development dialog between architecture, design, and technology. It offers an attractive design reduced to the essential elements through a focus on function, a clear stylistic idiom and discreet elegance.

Simple. Impressive. Pioneering.

The features in the elevator cab stand out for their carefully selected materials, elegant colors and functional surfaces. The quality equipment also includes ergonomic operating panels, stainless steel handrail systems and LED lighting systems with glare-free light. All of these make this proven elevator a future-proof investment.

## **ISI 2040® Cost effectiveness**

Because the drive technology requires no machine room, the ISI 2040® is an extremely space-saving option. The low energy and operating costs, high-quality materials and careful implementation of ambitious detailed solutions ensure it can retain its value for the long-term. In addition to its unique drive advantages, the ISI 2040® has the key benefits of a series product.

Simple planning. Quick production. Reliable installation. Easy service.

We guarantee the project will run smoothly through our personal project support.

Combined with excellent service, the ISI 2040® stands for the high availability you expect from Schmitt+Sohn elevators.

## **ISI 2040® Availability**

Our development process focuses on safety, ergonomics, and riding comfort.

Users, operators, and service personnel enjoy the effective protection of a comprehensive safety concept, developed in accordance with European standards and always type-tested. Our employees are qualified in-house in development, sales, production, installation, and service, ensuring the highest level of quality and availability. Since we only use our own production, personnel, and ensure replacement parts availability, we guarantee service is always available for all Schmitt+Sohn elevators.



ISI 2040<sup>®</sup>  
QUALITY  
PERFECT TO  
THE LAST DETAIL

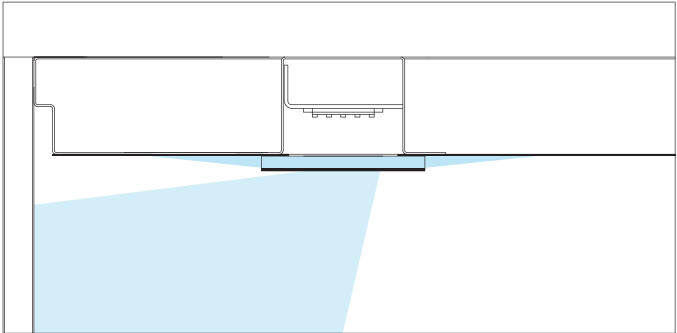




Lighting LD7 Wallwasher

- Dimensions: HWD 12 x 132 x 1,260 mm\*
- Trim: Metal, painted brilliant white
- Filter panel: Acrylic glass, white, semi-transparent
- Light frame: Acrylic glass, white, satin finish
- Light sources: LED neutral white

\* Example dimensions for car size,  
width 1,100 mm x depth 1,400 mm

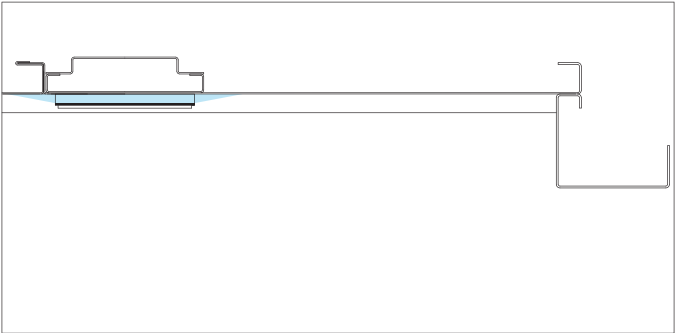


Vertical section of ceiling with integral LED light and fitted filter panel,  
light frame and trim.  
Lighting scheme, wallwasher and light frame.



Operating panel BT-I-TFT-LED

- Dimensions: HWD 1,205 x 150 x 15 mm
- Operating panel: Stainless steel, satin finish
- Light frame: Acrylic glass, white, satin finish, LED white
- Information panel: Acrylic glass, white
- Display: High-resolution TFT
- Buttons: Stainless steel, satin finish, inset flush
- Call acceptance: Blue LED
- Symbols: Plastic, light grey

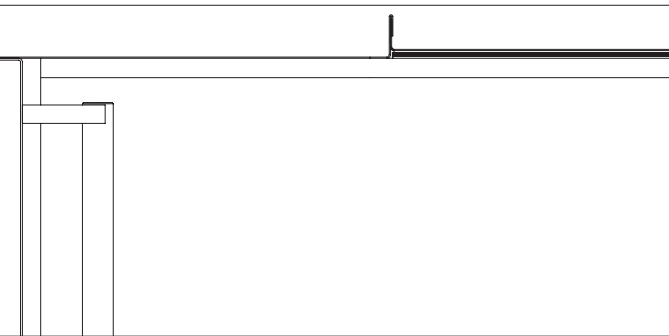


Horizontal section of side wall with fitted operating panel.  
Lighting scheme, light frame .



Handrail HL / Mirror S2

- Handrail: Stainless steel, satin finish, ø 33.7 mm
- Handrail holder: Stainless steel, satin finish, solid.
- Handrail ends: Stainless steel, satin finish, welded
- Mirror S2: Rear wall, centre, cab height, bright, inset flush, mirror edges ground and polished



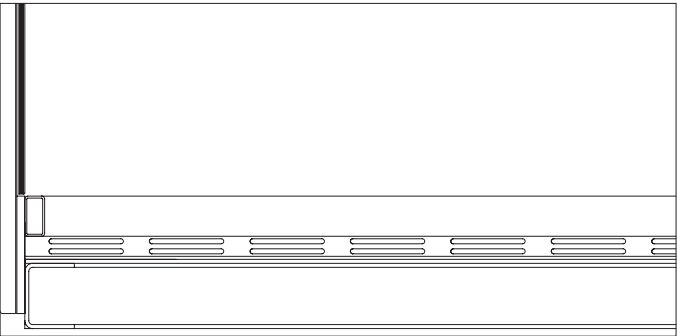
Horizontal section of rear wall / side wall.  
Mirror inset flush into rear wall.



Floor / skirting rail / mirror S2

- Floor: DC plastic, DC 2 stripes\*
- Skirting rail: Stainless steel, satin finish

\* Free from PVC, chlorine and plasticizes, heavy-duty and hard-wearing, low maintenance, and environmentally friendly.



Vertical section of rear wall / floor.  
Skirting rail fitted. Concealed, generously dimensioned cab ventilation under the skirting rail.





Detail	Description	Series	Accessories
Walls	Plastic-coated, single colour	●	
	Stainless steel, satin finish, stainless steel, linen		○
Ceiling	White. Concealed, generously dimensioned cab ventilation at cabin depth in both side walls	●	
Lighting	LD7 LED wallwasher, indirect and glare-free illumination. LED neutral white. Shade, varnished metal, brilliant white. Filter disk and illuminated frame made of white acrylic glass, semi-transparent.	●	
	LD7 LED RGB wallwasher. LED neutral white, LED RGB with colour and light control <sup>1)</sup>		○
	LD8 LED illuminated ceiling, direct and glare-free illumination. LED neutral white. Aluminium frame, brilliant white, light surface made of white plastic, semi-transparent <sup>13)</sup>		○
	LD8-LED-RGB illuminated ceiling. LED neutral white, LED-RGB with color and light control <sup>13)</sup>		
Floor	DC plastic, DC 2 stripes <sup>2)</sup>	●	
	Linoleum, rubber nubs, EL plastic <sup>2)</sup> , granite		○
	Lowered cab floor for installed floor covering <sup>3)</sup>		○
Skirting rail	Stainless steel, satin finish. Concealed, generously dimensioned cab ventilation	●	
Protection rails	Luggage protection rails, Stainless steel, satin finish, 100 x 20 mm		○
Mirror	Mirror S2, glass with splinter protection film, rear wall, centre, cab height, bright, inset flush, mirror edges ground and polished <sup>4)</sup>	●	
	Mirror S5, glass with splinter protection film, rear wall, cab width, half-height, bright, surface-mounted, edge protection of stainless steel, satin finish, mirror edges ground and polished <sup>4)</sup>		○
Handrail	Stainless steel, satin finish, suitable for the handicapped to DIN EN 81-70 <sup>5)</sup> , side wall ø 33.7 mm, cab depth. Handrail holder stainless steel, solid. Handrail ends: Stainless steel, welded	●	
	Second handrail opposite, next to operating panel		○
Operating panel Cab	Stainless steel, satin finish, positioned suitable for the handicapped to DIN EN 81-70 <sup>5)</sup> , concealed attachment. Information panel acrylic glass, white, light frame acrylic glass, white, satin finish, LED. Display neutral white high-resolution TFT. Short-travel buttons, flush, round, button surface stainless steel, call acceptance blue LED, symbols plastic, light grey	●	
	Stainless steel, satin finish, suitable for the handicapped to DIN EN 81-70 Appendix B, horizontal, concealed attachment. Separate information panel. Large, raised buttons, round, button surface stainless steel, call acceptance blue LED, symbols raised, tactile, plastic, light grey <sup>6)</sup>		○
	Nameplates in control panel NS2 <sup>14)</sup>		○
Nameplate panel	Stainless steel, concealed attachment. Acrylic glass, white, with transparent view window. Nameplate acrylic glass, white, digital print, process black. Acrylic glass illuminated frame, white, satin finish LED neutral white.		○
Cab portal	Stainless steel, satin finish	●	
	Stainless steel, linen		○
Cab door	Stainless steel, satin finish, two-piece, one-sided opening, door height 2,000 mm	●	
	Door height 2,100 mm <sup>7)</sup>		○
	Stainless steel, linen		○
Door drive	Energy-saving regulated drive with intelligent travel measurement	●	



Brilliant white



Light grey



Lime green

Detail	Description	Series	Accessories
Door monitoring	2-D safety light grid over full door height	●	
	3-D safety light grid with vestibule monitoring		○
Shaft doors	Primed, two-piece, one-sided opening, height as for cab door	●	
	Stainless steel, satin finish, stainless steel, linen <sup>8)</sup>		○
	Wall bezel settings M1, primed, stainless steel, satin finish, stainless steel, linen		○
Operating panel Shaft door	Stainless steel, satin finish, mounted in door frame, concealed attachment. Short-travel buttons, inset flush, button surface stainless steel, call acceptance blue LED, symbols plastic, light grey	●	
	Positioned in the masonry, easier accessibility to DIN EN 81-70, cover plate screw-fitted		○
	Large buttons, suitable for the handicapped to DIN EN 81-70 Appendix B, panel width 80 mm		○
Controls	Collective single-button control using the latest bus technology. Fast orientation and avoidance of selection mistakes for short waiting times and high carriage capacity. Service panel at the top stopping point, primed <sup>9)</sup> . Over-load control. Frequency regulation for load-independent travel curves and accurate stopping. Battery-buffered, load-dependent emergency escape at the next stopping point.	●	
	Emergency power and evacuation functions. Access control systems. Penthouse control. Priority carriage with key switch. Floor announcement. Travel direction displays and acoustic signals to DIN EN 81-70. Interfaces to building control systems		○
	Service panel stainless steel, satin finish, Stainless steel, linen		○
	Service access point frame at any stop or service panel in neighbouring rooms. <sup>9)</sup>		○
	Collective two-button control, collective group control		○



Light orange



Azure blue



Pearl white



Stainless steel

Detail	Description	Series	Accessories
Emergency call system	Digital emergency call and diagnosis system to EN 81-28 for emergency call transmission to the continually-manned Schmitt+Sohn Service Centre. Electronic misuse suppression <sup>10)</sup>	●	
	Video misuse identification for the digital emergency call and diagnosis system <sup>10)</sup>		○
	Remote monitoring of elevator attendant functions, transmission of diagnosis data, GSM module <sup>10)</sup>		○
Shaft	Acoustic decoupling element for the drive to reduce structure-borne sound transmission that meets the increased requirements of DIN 8989. <sup>12)</sup>		○
Drive	Gearless cable drive in the shaft. High efficiency and low power consumption. Load dissipation via the guide rails into the shaft pit. Speed 1.0 m/sec. Travel height up to 45 m	●	
Lifting gear	Plastic-sheathed steel cable, quiet running, reduced wear (compared to conventional steel cables), maintenance-free. No electronic monitoring and no lubrication required.	●	

We will be happy to assist you with your planning.  
Please contact us.

Subject to technical amendment.

Detail	Description	Series	Accessories
Energy-saving mode	Deactivation of cab light, fan and displays in the event of stoppage. On call entry, the assemblies switch themselves on again automatically. Potential saving of up to 70% of power consumption	●	
Stand-by mode	Staggered shutdown of light curtain, controls and frequency regulation after a long standstill time (night mode)		○
Energy calculator	Preparation of energy efficiency forecasts according to ISO 25745		○
Shaft smoke extraction	X-Trac: heat loss reduction system via shaft ventilation. Electrically controlled window, rooflight dome or ventilation hood.		○
Intermediate circuit collective switching	Reciprocal energy feed in case of opposite movement direction of cabs in one group <sup>11)</sup>		○

- 1) In RGB mode, reduction of the brightness in the cab is possible.

2) Free from PVC, chlorine and plasticizes, heavy-duty and hard-wearing, low maintenance, and environmentally friendly.

3) Maximum 50 kg/m² and 20 mm thickness. Changes of colour shade possible depending on floor covering.

4) For elevators with two opposing entrances, only the S5 mirror is available.

5) Agreement required between the customer and Schmitt+Sohn on proper use. Not for 320 kg capacity.

6) Not for 320 and 450 kg capacity.

7) Not available in case of reduced shaft head of 2,600 to 2,800 mm.

8) Service access point frame analogous to shaft door.
- 9) Observe possible fire safety requirements in necessary stairwells.

10) Redirection to the Schmitt+Sohn Service Centre and permanent on-call readiness is agreed in a separate service contract.

11) On request.

12) Building shell requirements in accordance with DIN 8989 must be observed on-site.

13) Multi-piece illuminated ceiling/s at Q≥1,000 kg.

14) Only for 2–5 stops, floor buttons in single row.







Light grey



Lime green



Light orange



Azure blue



Pearl white



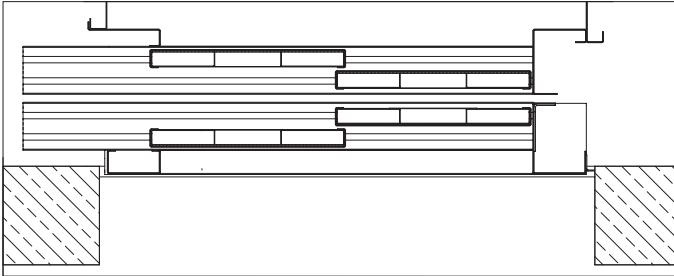
Stainless steel, polished





Wall connection T1

- |                               |   |
|-------------------------------|---|
| Shaft door:                   | Two-piece, one-side opening, sliding door, primed steel plate<br>Accessories: Stainless steel, satin finish |
| Door frame / wall connection: | Primed steel plate<br>Accessories: Stainless steel, satin finish  |
| Operating panel:              | Stainless steel, satin finish   |
| Buttons:                      | Stainless steel, satin finish, inset flush  |
| Call acceptance:              | Blue LED  |
| Symbols:                      | Plastic, light grey   |



Horizontal section of cab and shaft door with door frame / wall connection T1.



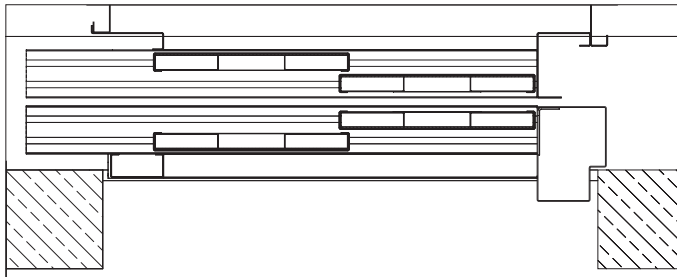


Cab and shaft door with  
wall connection T1  
Door sills

Wall connection T1 with  
service access frame

- Shaft door: Two-piece, one-sided opening, sliding door, primed steel plate  
Accessories: Stainless steel, satin finish
- Door frame / wall connection: Primed steel plate  
Accessories: Stainless steel, satin finish
- Cab door: Two-piece, one-sided opening, sliding door, stainless steel, satin finish
- Door sills: Aluminium

- Service access frame: Primed steel plate  
Accessories: Stainless steel, satin finish



Horizontal section of door opening to one side/service access frame



Cab and shaft door with  
wall connection T1  
Door sills, service access frame

Operating panel BT-TP-66

- Service access frame: Primed steel plate  
Accessories: Stainless steel, satin finish

- Dimensions: HWD 305 x 66 x 2 mm
- Operating panel: Stainless steel, satin finish
- Buttons: Stainless steel, satin finish, inset-flush
- Call acceptance: Blue LED
- Symbols: Plastic, light grey

# ISI 2040<sup>®</sup>

## ACCESSORIES FOR INDIVIDUAL REQUIREMENTS





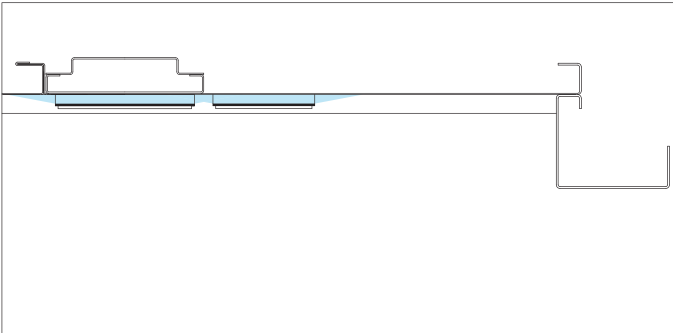
Nameplates NS2

Dimensions: HW 30 x 81 mm  
 Nameplates: Stainless steel, satin finish, individually replaceable  
 Lettering: Dark grey engraving



Name plate panel TNS 2-LED

Dimensions: HWD 763 x 90 x 15 mm  
 Name plate panel: Stainless steel, polished, White acrylic glass, with transparent view window  
 Light frame: Acrylic glass, white, satin finish Neutral white LED  
 Name plate: Acrylic glass, white, Digital print, process black



Horizontal section of side wall with fitted operating panel and name plate panel.  
 Lighting scheme, light frame.

# ISI 2040<sup>®</sup> LIGHTDESIGN

THE 4TH DIMENSION  
OF ARCHITECTURAL  
DESIGN.







# LD7 LED RGB wallwasher

Schmitt+Sohn light design make many attractive light designs possible by using intelligent RGB colour controls. Colours, colour changes and colour rhythms can be effectively combined with each other. This is how impressive, inspiring and out-of-the-ordinary atmospheric lighting can be achieved in the elevator car.

The colours change in the illuminated frame of the car. The light coming from the side is optically enhanced in the reflection on the car ceiling. The excellent basic brightness in the car is generated by the powerful white LED illuminated frame and the LED area in the centre.

Light installations can be programmed in accordance with customer-specific, design or functional requirements.

Applications are, e.g.:  
Simulation of a natural cycle of daylight.  
Creating lighting effects,  
Colour floor visualisation

ISI 2040® elevator with LD7 LED RGB wallwasher.

Dimensions:	HWD 12 x 132 x 1,260 mm*
Lamps:	power LED
Accessories:	LED RGB, colour control
Illuminated frame:	white acrylic glass, satin-finished, semi-transparent
Shade:	varnished metal, brilliant white
Filter disk:	white acrylic glass, semi-transparent

\* Example dimensions for car size, width 1,100 mm x depth 1,400 mm



Vertical section of LD7 LED RGB wallwasher  
Functional diagram of direct and indirect lighting





ISI 2040® elevator with LD8 LED illuminated ceiling.

- Dimensions: HWD 38 x 940 x 1,300 mm\*
- HWD 50 x 940 x 1,300 mm (LD8-LED-RGB)
- Edge distance to side walls 80 mm each, to entry side and to back wall 50 mm each.
- Lighting: power LED, neutral white
- Accessories: LED RGB color control
- Frame: aluminium, brilliant white
- Light surface: plastic, white translucent, B1 flame-resistant

\* Example dimensions for car size, width 1,100 mm x depth 1,400 mm



Vertical section of LD8 LED illuminated ceiling. Functional diagram of direct lighting. LED neutral white.

### LD8 LED illuminated ceiling LD8 LED RGB illuminated ceiling

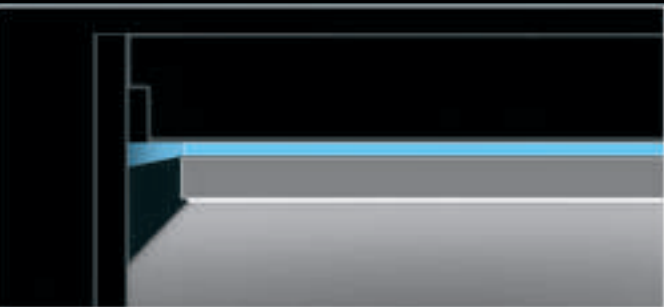
Highest functionality, puristic design and brilliant light technology characterise the totally new LD8 LED illuminated ceiling. The homogenous, neutral white illuminated surface and the very flat design of the LD8 are among its essential features.

The especially developed frame geometry not only achieves a virtually frameless light surface – it also gives the LD8 a very delicate appearance. The interior of the elevator car appears generously roomy and elegant. Impressive colours and shapes are a feast for your eyes.

Intelligent LED RGB color control facilitates versatile and attractive lighting designs. Colors, color changes and rhythms can be combined with one another effectively. This creates impressive, inspiring, and unusual lighting effects in the elevator cab.

Colors change in the illuminated frame of the cab lighting. The light coming from the side is visually amplified by the reflection on the ceiling of the cab. The powerful LED light panel in the car generates excellent brightness. Lighting effects can be programmed based on customer-specific, design, or functional requirements.

- Applications include, for instance:
- Simulating the natural progression of daylight
- Creating lighting moods
- Visualizing different floors in different colors



Vertical section LD8 LED RGB - illuminated ceiling. Functional diagram of direct lighting. LED neutral white, LED RGB lighting control.



ISI 2040® elevator with LD8 LED RGB illuminated ceiling.



Operating panel EN 81-70-B

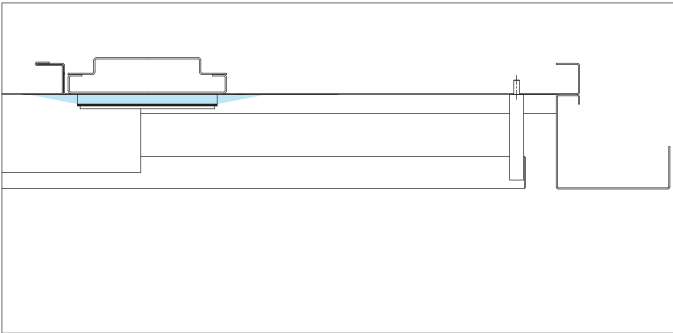
Display panel AT-I-TFT-LED

Dimensions:	HWD 180 x 500/600 x 99.5 mm
Operating panel:	Stainless steel, satin finish EN 81-70, Appendix B
Buttons:	Stainless steel, satin finish, large buttons, raised. Main access: Plastic ring, green, raised. Emergency call button: recessed
Call acceptance:	Blue LED
Symbols:	Plastic, light grey, raised, tactile

Dimensions:	HWD 490 x 150 x 15 mm
Display panel:	Stainless steel, satin finish
Light frame:	Acrylic glass, white, satin finish, LED neutral white
Information panel:	Acrylic glass, white
Display:	high-resolution TFT

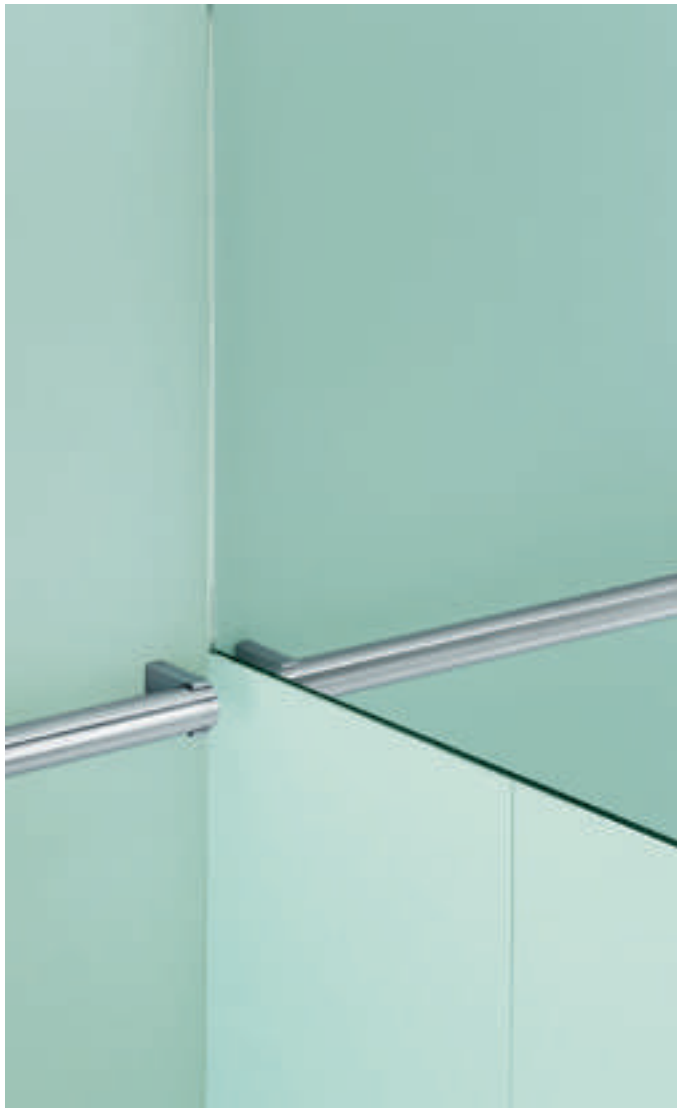


Vertical section of side wall. Operating panel EN 81-70-B.



Horizontal section of side wall with operating panel DIN EN 81-70, Appendix B. Surface-mounted display panel. Lighting scheme, light frame.



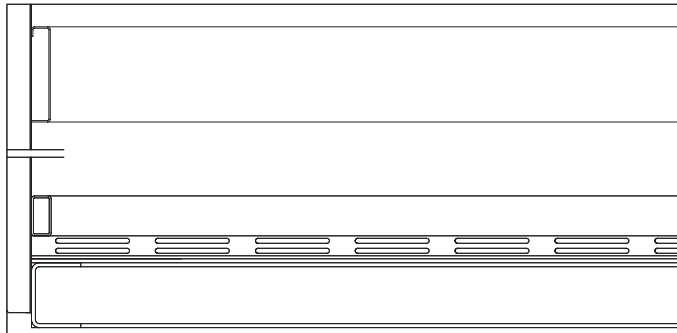


Luggage protection rails

Dimensions: HW 100 x 20 mm  
Stainless steel, satin finish

Mirror S5

Mirror S5: Rear wall, cab width, semi high, bright, suitable for the handicapped to DIN EN 81-70, surface-mounted, mirror edges ground and polished  
Mirror palister: Stainless steel, ground and polished, edge protection



Vertical section of rear wall/floor.  
Fitted luggage protection rails.



Vertical section of rear wall / mirror S5, surface-mounted.



Cab and shaft door with wall connection T1 and wall bezel M1

Wall bezel: Primed steel plate  
Accessories: Stainless steel, satin finish

Operating panel BT-TP-LED-66-1  
Operating panel BT-TP-LED-66-2  
Collective two-button and group control

Dimensions: HWD 305 x 66 x 2 mm  
Operating panel: Stainless steel, satin finish, concealed attachment  
Display: Blue LED  
Buttons: Stainless steel, satin finish, flush-mounted, positioning to DIN EN 81-70  
Call acceptance: Blue LED  
Symbols: Plastic, light grey





## Responsibility

„One customer – one responsible project manager. The expectations we place on ourselves are exacting. For the customer, this means they always have a competent partner to handle all of their needs from the first planning meeting to acceptance by the building owner, throughout Europe.“

Florian Hensen, New system sales



# ISI 2040<sup>®</sup>

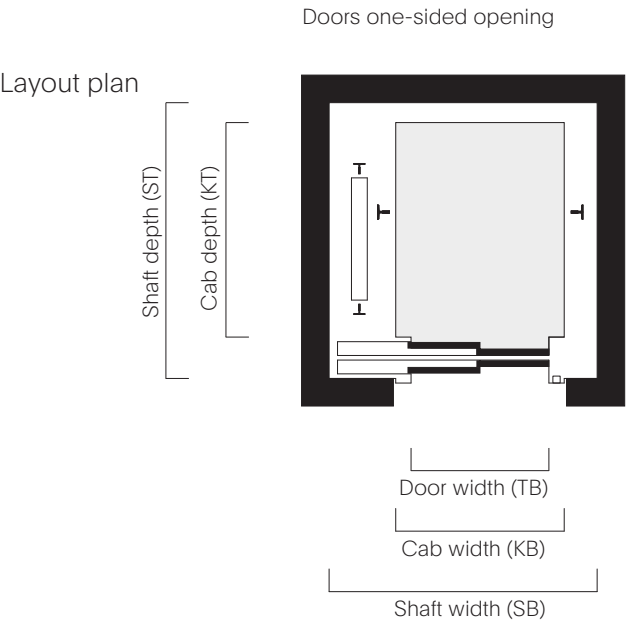
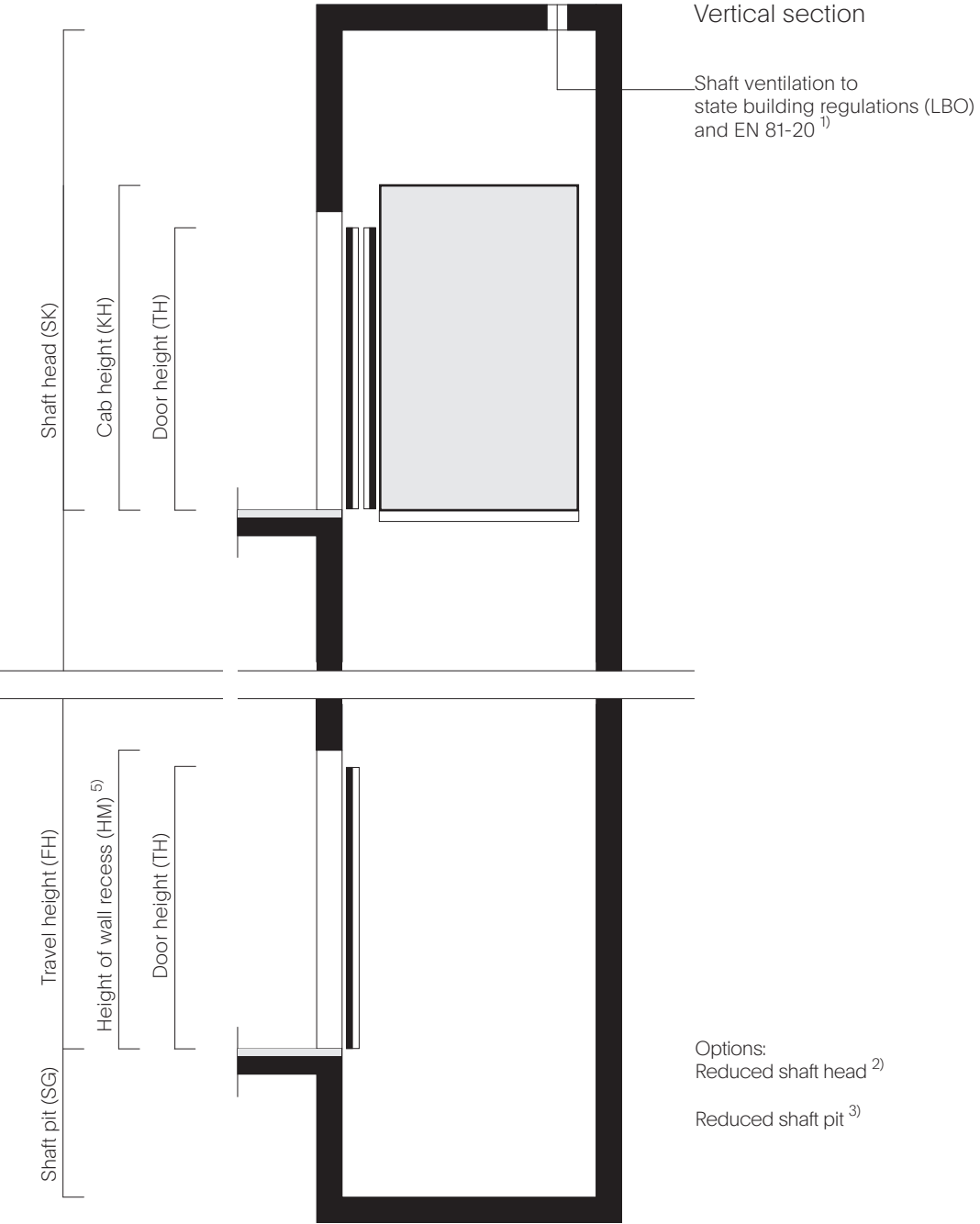
## THE PLANNING

Technical drawing and dimension

Door height (TH)

Cab height (KH)

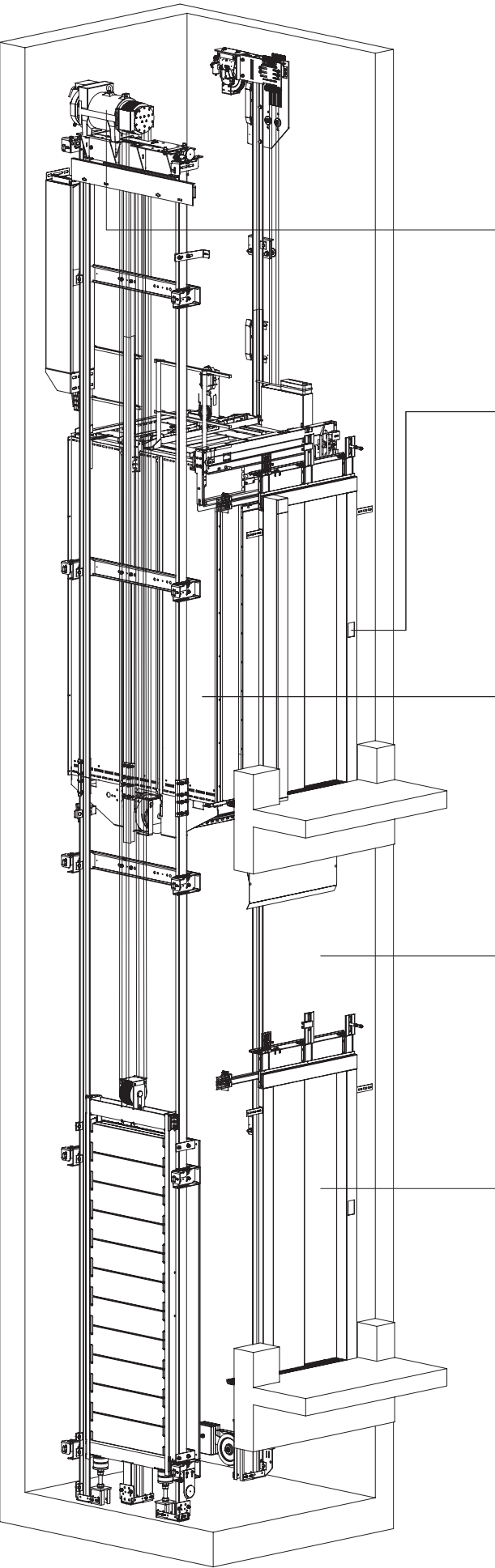
Shaft head (SK)



- 1) Compliance with the Buildings Energy Act (GEG) on site.
- 2) Reduced shaft head:
  - ≥ 3,000 to < 3,500 mm with alternative measures technically possible.
  - ≥ 2,800 to < 3,000 mm in consultation and with technical clarification with alternative measures possible.
  - ≥ 2,600 to < 2,800 mm, CH 2,100 mm, DH 2,000 mm in consultation and with technical clarification with alternative measures possible.Note: there are different approvals for reduced shaft heads and shaft pits in individual countries. In some cases a reduction is not permitted. A clarification with the authorities responsible may be necessary. We will be happy to support with your inquiries.
- 3) Reduced shaft pit: ≥ 500 mm (with 6 mm floor covering und adhesive).
- 4) Reduced shaft head < 3,000 mm:
  - SW + 50 mm at 320 to 675 kg
  - SW + 100 mm at 1,000 kg.
- 5) Door height 2,100 mm optional (not available for SK < 2,800 mm).  
Height of wall recess: HM = TH + 115 mm.
- 6) Shaft depth reduced by 120 mm is possible with arrangement of the shaft doors in niches.
- 7) Shaft depth reduced by 240 mm is possible with arrangement of the shaft doors in niches.

We will be happy to assist you with the planning and tender.  
Please give us a call.

Capacity in kg and persons		Cab dimensions in mm			Door dimensions in mm		Shaft dimensions in mm				
kg	Persons	Width (KB)	Depth (KT)	Height (KH) <sup>3)</sup>	Width (TB)	Height (TH) <sup>5)</sup>	Width (SB) <sup>4)</sup>	Depth (ST)		Shaft pit (SG) <sup>3)</sup>	Shaft head (SK) <sup>2)</sup>
								Door one side <sup>6)</sup>	Opposite entrances <sup>7)</sup>		
320	4	900	1,000	2,200	800	2,000	1,400	1,350	1,540	1,050	3,500
450	6	1,000	1,250	2,200	900	2,000	1,550	1,600	1,790	1,050	3,500
630	8	1,100	1,400	2,200	900	2,000	1,550	1,750	1,940	1,050	3,500
675	9	1,200	1,400	2,200	900	2,000	1,650	1,750	1,940	1,050	3,500
1,000	13	1,100	2,100	2,200	900	2,000	1,550	2,450	2,640	1,050	3,500



ISI 2040®  
Type-approved elevator system  
to EN 81

The drive:

- Convenient: Superior, frequency-regulated drives
- Energy-saving: high-efficiency drives <sup>10)</sup>
- Quiet: Noise pressure level below the requirements of the standard <sup>12)</sup>
- Safe: Stop precision better than the standard. <sup>16)</sup>

The controls:

- Passenger comfort: Float up and down with the ISI 2040® <sup>17)</sup>
- Energy-saving mode: Automatic switching off of cab lights and displays after longer standstill. <sup>10)</sup>
- Stand-by mode: Staged running-down of controls and frequency regulation after longer standstill <sup>10)</sup>
- LED technology: In operating and display panels <sup>10)</sup>
- Bus technology: Easy installation and maintenance

The cab:

- Large: Maximum shaft utilisation in new and existing shafts <sup>2-7)</sup>
- User-friendly: Fast orientation and easy operation
- Bright: Cabin lighting with vertical light, illumination of the side walls, indirect, glare-free. <sup>14) 15)</sup>
- Airy: Generous ventilation in the skirting and ceiling area <sup>18)</sup>
- Friendly: Materials, colours and surfaces
- Smooth: Horizontal and vertical acceleration with top values <sup>17)</sup>

The elevator shaft:

- Maximum cab size: In new and existing systems <sup>2-7)</sup>
- Adaptable: Optional reduction of shaft pits and heads <sup>2) 3)</sup>
- Elevator shaft smoke extraction: heat loss reduction system via shaft ventilation, optionally with electrically controlled window, rooflight dome or ventilation hood <sup>1)</sup>
- Quiet running: plastic sheathed specialised cable <sup>12)</sup>

The doors:

- Convenient: Adjustable operating settings <sup>17)</sup>
- Safe: Light curtain with narrow detection range
- Stand-by mode: Running-down of light grid after longer standstill (night mode) <sup>10)</sup>
- Flexible: Left- or right-opening. One-sided or opposite
- Fire resistance: certified according to EN 81-58

Subject to technical amendment.

Capacity in kg	Energy efficiency class <sup>10)</sup>	Noise pressure level in dB (A)					
		In front of shaft doors		In the cab		In the shaft	
		DIN <sup>11)</sup>	ISI 2040® <sup>12)</sup>	DIN <sup>13)</sup>	ISI 2040® <sup>12)</sup>	DIN <sup>11)</sup>	ISI 2040® <sup>12)</sup>
320	A	65	40	No specification	50	75	51
450	A	65	40	No specification	50	75	51
630/675	A	65	40	No specification	50	75	51
1,000	A	65	40	No specification	50	75	51

Capacity in kg	Brightness in Lux		Stopping accuracy in mm			
	1 m above cab floor		Stopping accuracy		Adjustment accuracy	
	EN 81 <sup>14)</sup>	ISI 2040® <sup>15)</sup>	EN 81 <sup>16)</sup>	ISI 2040®	EN 81 <sup>16)</sup>	ISI 2040®
320	min. 100	min. 200	+/- 10	+/- 3	+/- 20	+/- 8
450	min. 100	min. 200	+/- 10	+/- 3	+/- 20	+/- 8
630/675	min. 100	min. 200	+/- 10	+/- 3	+/- 20	+/- 8
1,000	min. 100	min. 200	+/- 10	+/- 3	+/- 20	+/- 8

Capacity in kg	Smoothness in milli-G <sup>17)</sup>		Air volume determination in terms of air exchange rate in in m³/h	
	horizontal	vertical	DIN <sup>18)</sup>	ISI 2040®
320	8.5 +/- 1	13.5 +/- 1	10	36
450	8.5 +/- 1	13.5 +/- 1	14	39
630/675	8.5 +/- 1	13.5 +/- 1	17	53
1,000	8.5 +/- 1	13.5 +/- 1	25	66

10) The basis for calculation is usage category 2 in accordance with VDI 4707 for an ISI 2040® with 1000 kg capacity, 25 m travel height and 1.0 m/sec. speed as well as energetic recovery system.

11) DIN 8989, Acoustical design in buildings - Elevators. Compliance with DIN 4109 on the basis of DIN 8989 must be ensured by structural sound protection.  
Constructional noise protection measures must be taken into account in the planning. Consultation on noise requirements is recommended.

12) The specified noise pressure levels refer to an ISI 2040® elevator in a concrete shaft with a mass per unit area in accordance with DIN 8989.

13) DIN 8989 specifies no reference value here.  
The noise pressure levels specify only the degree of comfort for the user.

14) N 81-20, safety rules for the construction and the installation of elevators. Requirement: minimum illumination level 1 m above the elevator car and on the control devices: 100 lux.

15) Further maximum values up to 350 Lux are possible, depending on the selected lighting and equipment.

16) EN 81-20  
Adjustment accuracy: At level differences ≥ 20 mm when loading and unloading, the elevator is adjusted and must regain the pre-scribed stopping accuracy.

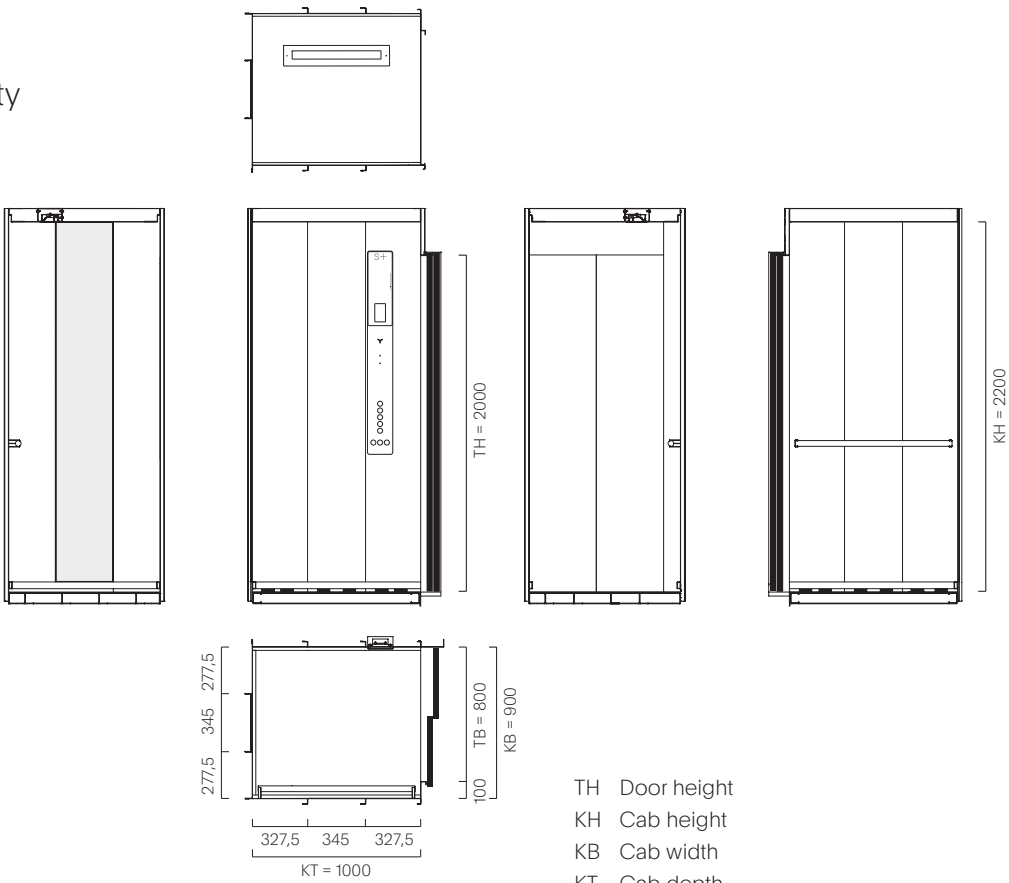
17) ISO 18738, Elevators - Measurement of passenger comfort of elevators, describes the measurement procedure.

18) DIN 1946 Part 1 and 2: Cab volume x 5.



# 320/4

320 kg Capacity  
4 Persons

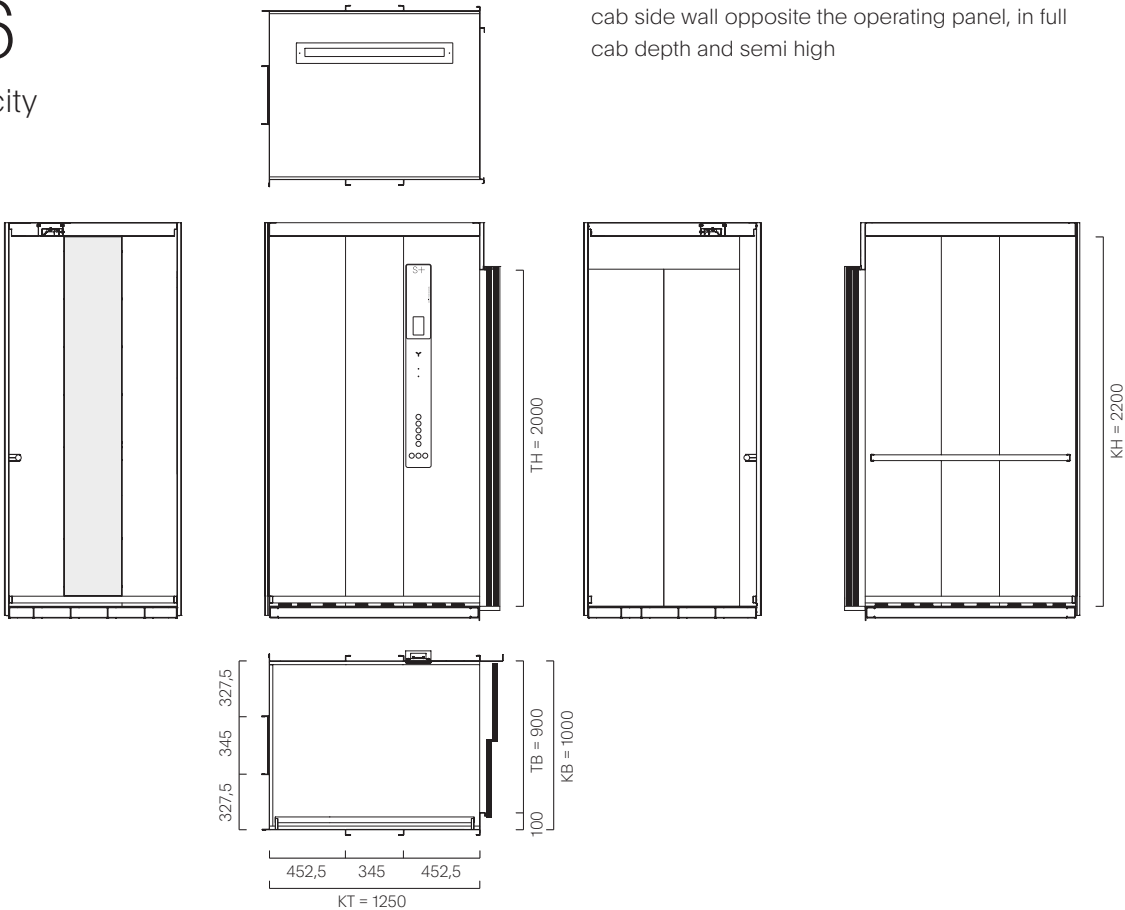


TH Door height  
KH Cab height  
KB Cab width  
KT Cab depth

Mirror: For elevators with two opposing entrances, only the S5 mirror is available, positioned on the cab side wall opposite the operating panel, in full cab depth and semi high

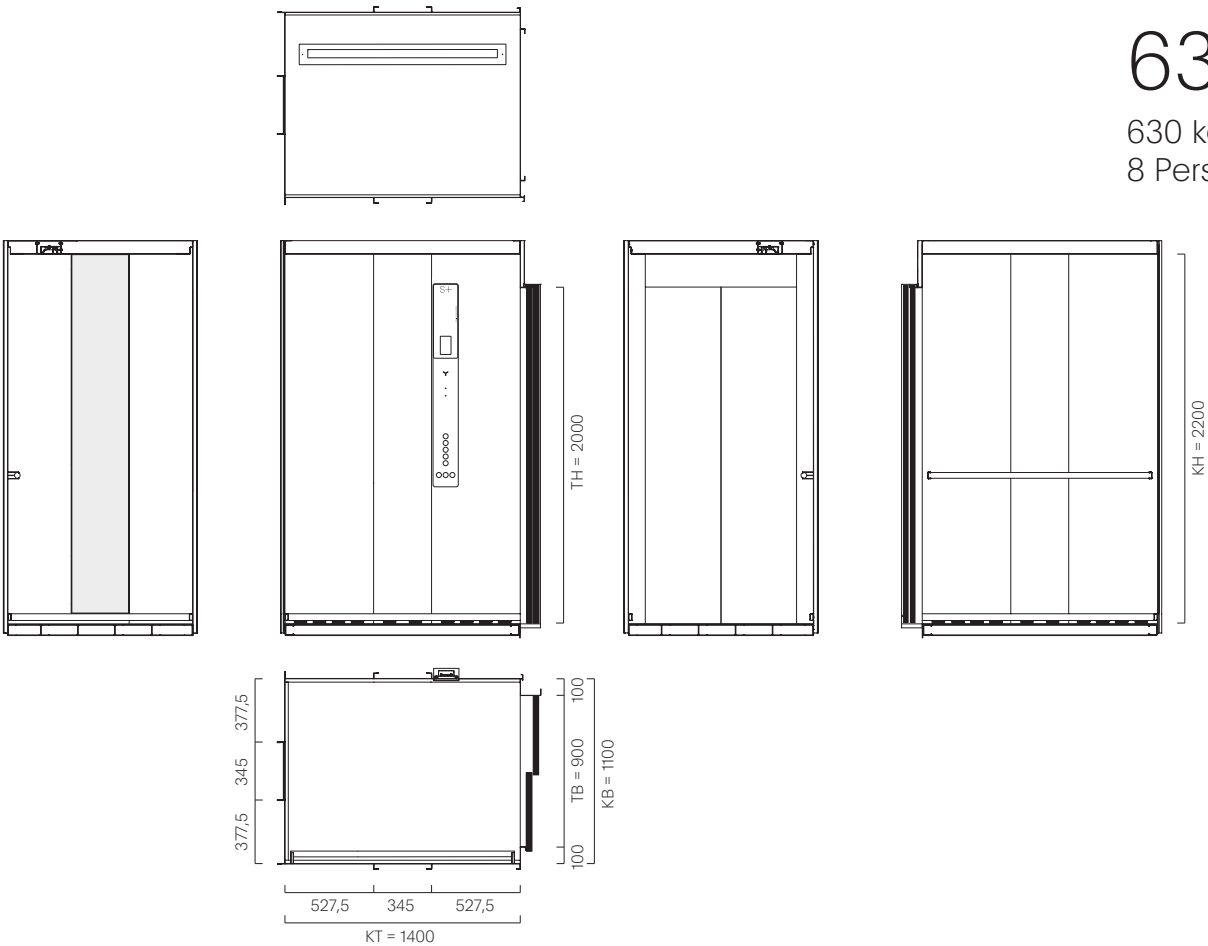
# 450/6

450 kg Capacity  
6 Persons



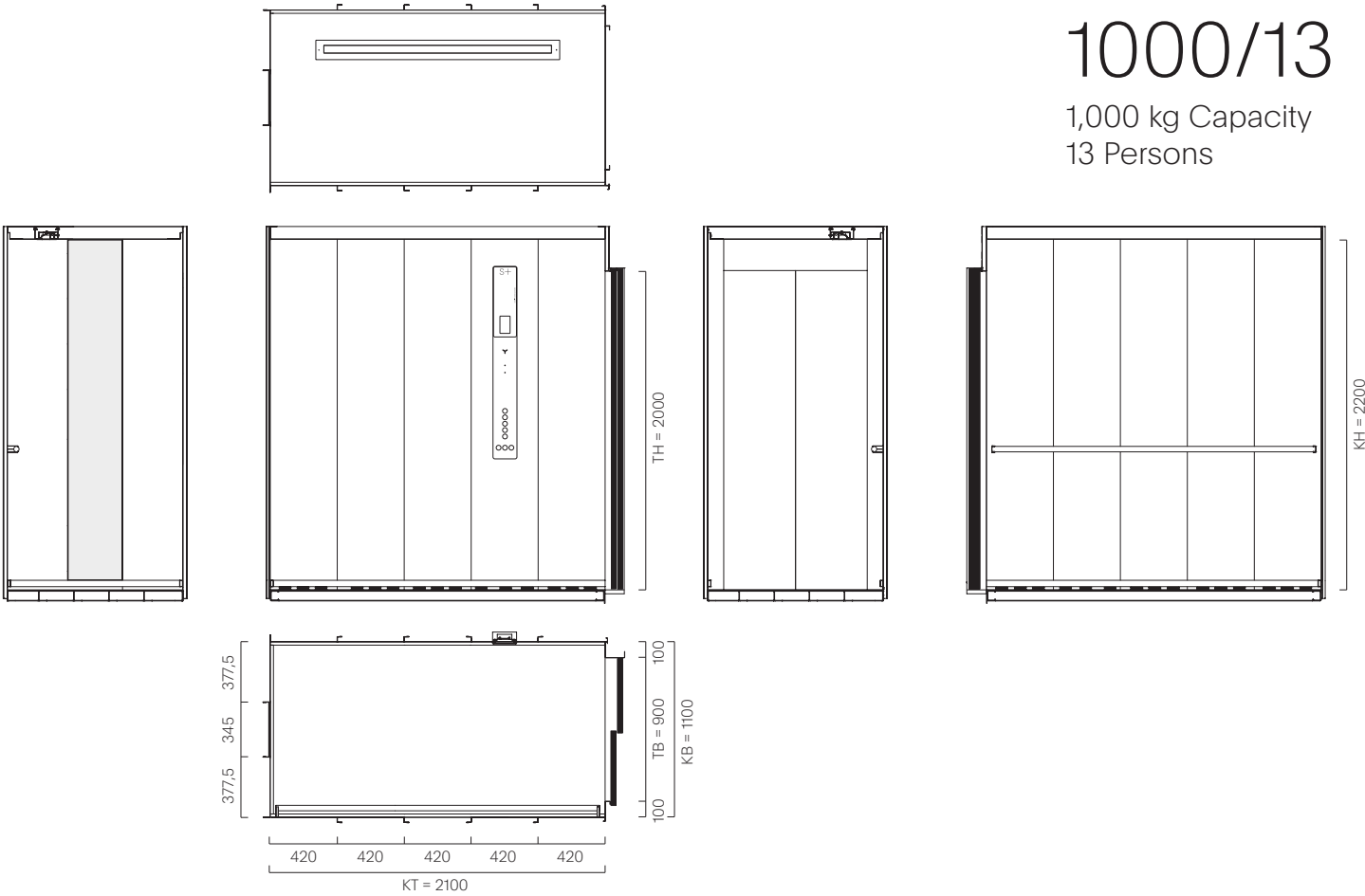
# 630/8

630 kg Capacity  
8 Persons



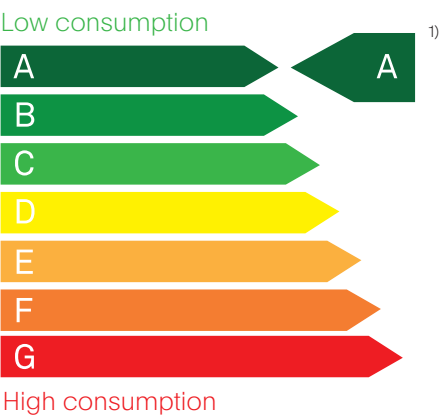
# 1000/13

1,000 kg Capacity  
13 Persons



# ENERGY EFFICIENCY

## THE ISI 2040<sup>®</sup> COMPLIES WITH THE HIGHEST ENERGY EFFICIENCY CLASS A<sup>1)</sup>



The energy consumption of all buildings in Germany is approx. 40% of the total energy consumption.<sup>2)</sup> Elevators take up to 3 to 5% of this, which in the whole of Europe makes 18 TWh annually.<sup>3)</sup>

The energy consumption of an elevator is determined by many factors. The main factors are:

- the movement consumption
- the consumption when stopped
- the energy loss due to heat escaping via the shaft ventilation

The weighting of the factors depends heavily on the use of the relevant elevator. The stopped consumption of elevators in residential buildings alone makes up about 70% of the total energy consumption of the elevators.

The power consumption is determined primarily by the system components and their energy efficiency.

For elevators which are mostly in standby operation, the energy consumption can be reduced by modern controls by up to 50%. For cable elevators subject to frequent usage, high-quality drives with a high efficiency level should be used. Intelligent control systems can be used to avoid mistaken trips and optimize call assignment in elevator groups, depending on the level of traffic. Reciprocal energy feed is possible in case of opposite movement direction of cabs in elevator groups. Roll resistance should be optimised by high-quality, maintenance-free ball bearings, round grooves and plastic-sheathed cables and lighter constructions.

A shaft smoke extraction system can reduce the energy loss caused by heat escaping through the shaft. Correct and sustainable elevator maintenance by qualified specialist personnel on the basis of EN 13015 permanently ensures the success of energy-saving measures.

1) The basis for calculation is usage category 2 in accordance with VDI 4707 for an ISI 2040<sup>®</sup> with 1000 kg capacity, 25 m travel height and 1.0 m/sec. speed as well as energetic recovery system.  
2) Source: REGIERUNGonline, Bauen und Wohnen  
3) Source: VDMA, Energieeffizienz in der Aufzugstechnik  
4) The calculation basis are shaft dimensions of 1,750 x 1,800 mm surface area, 5 doors 900 x 2,000 mm, one-sided opening, shaft height 16 m

# ADVANCED TECHNOLOGY FOR CONSISTENT ENERGY-SAVING.

**Energy-saving potential in movement consumption**  
The power consumption of elevators during movement depends mainly on the drive type. Modern, high-quality drive and control technology reduce the energy consumption significantly. This is shown by the comparison of the movement consumption of an ISI 2040<sup>®</sup> with common drive types:

- 20 % Energy-saving in comparison to a comparable cable elevator with gearbox and frequency regulation.
- 50 % Energy-saving in comparison to a comparable cable elevator with gearbox, pole-changing with 2 speeds.
- 80 % Energy-saving in comparison to a comparable hydraulic elevator.

**Energy-saving in standstill consumption**  
The power consumption of elevators during standstill depends mainly on its active consumption sources. The standstill consumption can comprise up to 82% of the total energy consumption of a elevator. The greatest energy-saving potential lies in the switching off of unneeded consumers. This is shown by the technical solutions of the ISI 2040<sup>®</sup>:

- 33 % Energy-saving potential through the use of efficient lighting and switching off the cab lighting when the elevator is at a standstill.
- 5 % Energy-saving potential through the switching off of the door drive and light grid.
- 1 % Energy-saving potential through the switching off of the cab stopping and direction displays.
- 10 % Energy-saving potential through the switching off of the frequency converter in off-peak times.

**Energy-saving potential in the shaft**  
Heat can escape unhindered to the outside through the required smoke extraction openings in the shaft head. Here the greatest energy-saving potential lies in closing the smoke extraction openings electrically operated dome lights or louvers. The dome lights or louvers open on smoke detection (automatically) or deliberate ventilation (manually).

10.400 kWh Energy-saving is possible throughout the year if the escape of heat through the smoke extraction openings in the shaft head is prevented.<sup>4)</sup>

**Three steps to the energy-efficient elevator**  
The planning of serviceable and capable elevator systems should at an early stage take into account the building type, the planned use, and the applicable legal standards and regulations. The energy assessment of an ISI 2040<sup>®</sup> in three steps:

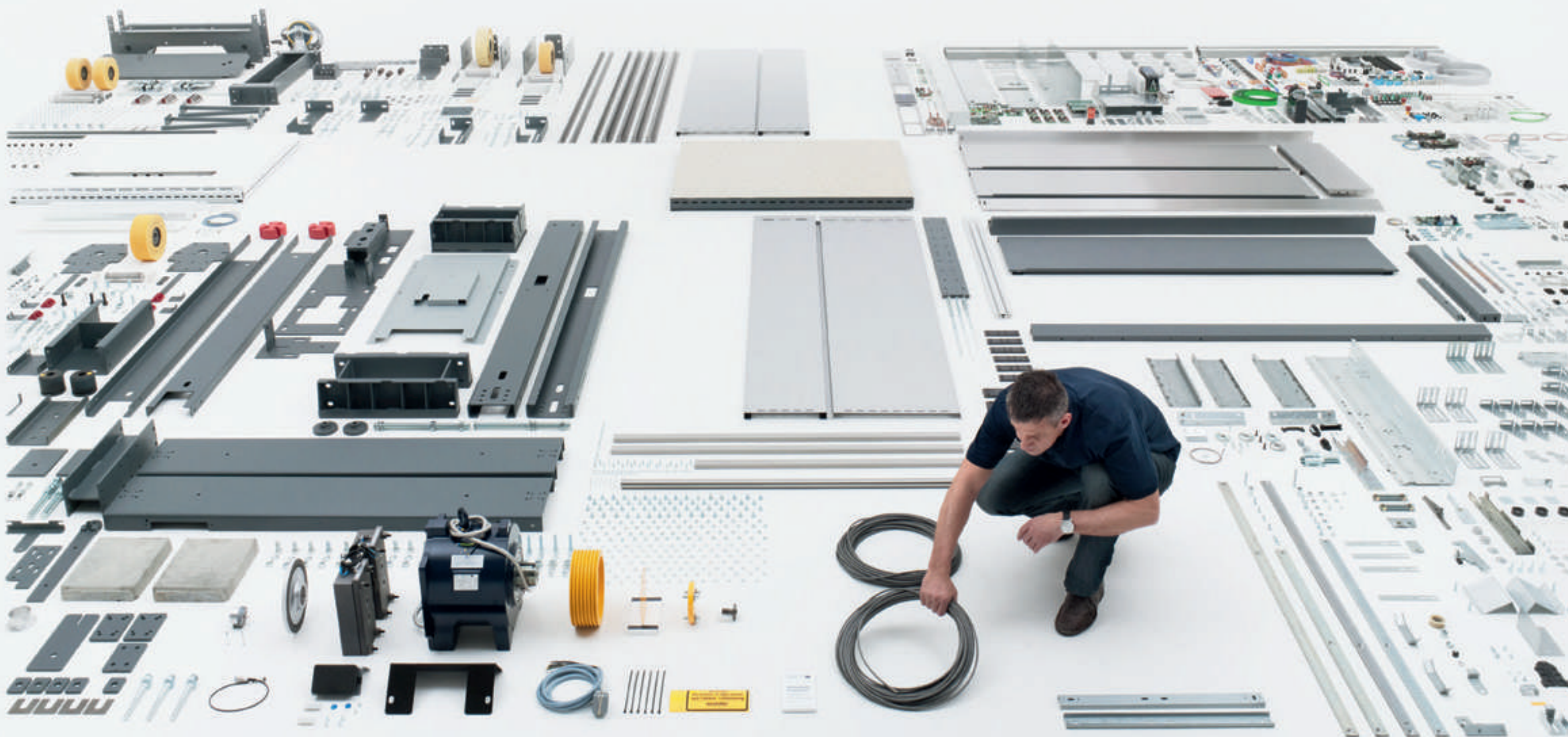
- Determination of the usage category
- Production of the energy-efficiency forecast
- Determination of heat energy loss through the smoke extraction openings in the shaft head

We will be happy to assist you with your planning. Please give us a call.



# ISI 2040<sup>®</sup>

## THE SERVICE





# PERSONAL, COMPETENT, AND ALWAYS AVAILABLE.

- 1+1

One customer - one responsible service manager.  
An experts partner for all matters relating to service.
- 50.000

Schmitt+Sohn maintains elevator systems annually, both own and other makes.
- 24/365/0

Our on-call service: 24 hours per day, 365 days per year with 0 waiting time.
- 638

Qualified service technicians. Always on the move. Specialist maintenance, repair and assessment of elevator systems..
- 117

Service managers are responsible for the customer, the service technicians and the elevator systems.
- 13015

DIN standard quality. The standard for qualified servicing of elevator systems.
- 657

employees in Technology, Development, Production and Administration.  
Fully up-to-date and service-orientated. Always on the job. Immediate reaction in case of emergency.
- 1

The central spare parts warehouse near Nürnberg, which stocks all spare parts, most of which are original parts from our own production.
- 34

Branches and sales offices throughout Europe. Closeness to our customers.  
For all types of service required for your elevator.
- 796

Service vehicles as mobile spare parts stores, carrying over 300 of the most important wear parts. Direct on site. Quick reaction times. High availability.
- 10.000

A Schmitt+Sohn elevator consists of over 10,000 parts, almost all of which we produce ourselves in our own works. Genuine original parts to consistently high quality. 20 years spare parts guarantee. For orders placed before 16:00, we deliver any of these 10,000 parts overnight.



- 3

Performance-based service contracts.  
For a long-lasting partnership.
- SYSTEM MAINTENANCE

The service contract for system maintenance covers the checking and servicing of all safety devices, setting and adjustment work to DIN 31051.
- FULL MAINTENANCE

The service contract for full maintenance covers all costs which may be incurred in connection with the operation of an elevator system:  
Maintenance work and repair measures, including all spare parts deliveries and fault rectification, and performance of regular, officially required tests.
- C 2000

The service contract C 2000 consists of modular services:  
Emergency call and video misuse detection, elevator attendant and building control technology module, online care all round the clock.





# NEXSD<sup>®</sup> NEXT ELEVATOR SERVICES

NEXSD<sup>®</sup> is the result of many years of research and development at the Schmitt+Sohn elevator company. Compatible with many different manufacturers and over 100 different controllers, NEXSD<sup>®</sup> offers the best service with complete transparency, predictive analytics and excellent availability thanks to intelligent algorithms.

Every ISI 2040<sup>®</sup> elevator is equipped with a NEXSD<sup>®</sup> Box and can offer all of the advantages of NEXSD<sup>®</sup>.

Because it is manufacturer-independent and can be retrofitted at any time, NEXSD<sup>®</sup> is unique on the market.



More information is available at:  
<https://www.schmitt-elevators.com/nexsd>.  
For a video on NEXSD<sup>®</sup>, please scan this QR code with your smartphone.

## NEXSD CUSTOMER COCKPIT<sup>®</sup>

The NEXSD CUSTOMER COCKPIT<sup>®</sup> provides access to all key operating data for your elevators in real time.

## NEXSD AWM<sup>®</sup>

Electronic elevator attendant  
The fourth generation of the elevator attendant fulfills all statutory requirements and is seamlessly connected to the controller. Elevator systems are tested fully and on an ongoing basis to detect problems promptly.

## NEXSD CARE<sup>®</sup>

The NEXSD CARE<sup>®</sup> system automatically records operating and fault data. Predictive analyses make it possible to detect and correct wear promptly.

## NEXSD INSPECT<sup>®</sup>

NEXSD INSPECT<sup>®</sup> is used to collect and analyze relevant data from systems subject to frequent faults. This makes it easier to determine the status of the system on a preventative basis, and identify necessary measures.

In every one of our 34 European branches, you will find competent contact partners, who will be able to assist you on all subjects relating to elevators.

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iF product design award 2008, Schmitt+ Sohn Color Glas® Elevators  
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red dot award communication design 2011, Schmitt+ Sohn Corporate Design  
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German Brand Award 2020, Gold in Excellent Brands for Schmitt+ Sohn Elevators



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