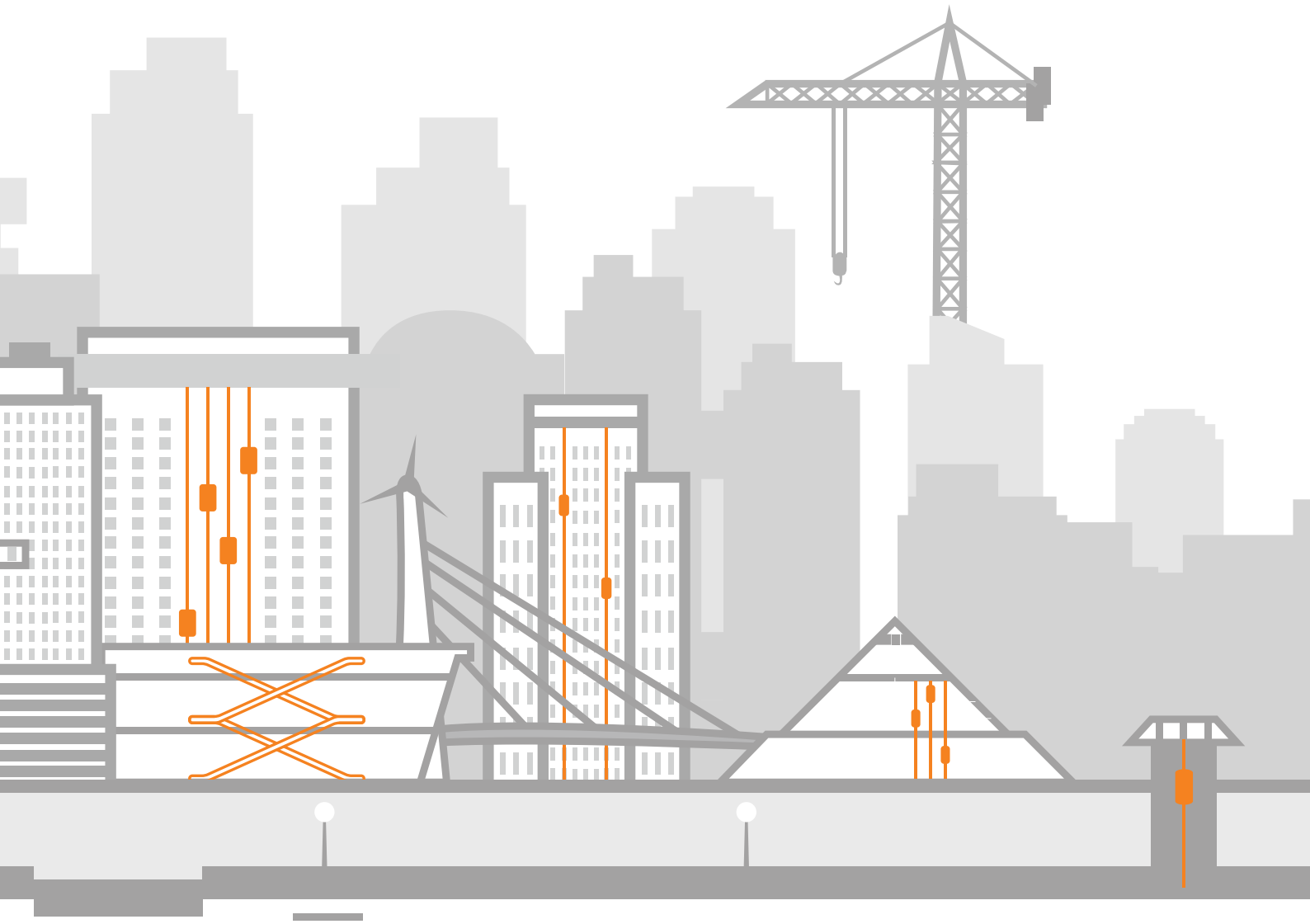
orbis™

elevators | escalators

empowering next level



about us

When it comes to pioneers in the business of state-of-the-art elevators and escalators, ORBIS is the name everyone identifies with. With close to three decades of expertise in the field, we are a reputed brand of manufacturing, installing and services of high-end elevators and escalators.

Founded in the year 1994, ORBIS is the pride of Ahmedabad, India's first heritage city, where we have a world-class manufacturing unit and R&D centre. ORBIS has a rich legacy in the business of people mobility; it took birth at a time very few understood the value of elevators and escalators in building of smart cities.

Today, ORBIS is a name to reckon with prestigious projects under its belt from all three sectors; public, private and corporate, owing to intense research and development that goes into the making of our cutting-edge products. We believe that customer satisfaction is the best way to measure success and churn out better products.

Among the many feathers in our cap, we take pride in being a trustworthy and responsible company that understands the business intimately; which is why we have zero accident credentials.

We at ORBIS are eager to cope with new challenges and meet global opportunities – hence "Empowering next level" is our mission statement that inspires us to create a qualitative change in aspects of technical development, product quality, manufacturing process and business management. By executing and delivering safe and excellent products in innumerable benchmark projects, our banner is soaring high globally.

Excellent Product Quality
ORBIS provides excellent product quality, compromising on absolutely nothing

Zero Accident Credential
ORBIS has zero accident credentials, making it one of the safest people mobility organizations in the world

Research & Development
Our intense focus on R&D and innovation spearheaded by acclaimed experts and engineers ensure world class products that comply with global standards

Aesthetic Design
Aesthetics are our USP with designers working tirelessly to showcase new trends, style and elegance in all our products, so that each is a masterpiece tailor-made for every building

Global Network
ORBIS has expanded its business across the globe with its presence in all major cities

Tailor-Made For You
ORBIS invests millions in research to create products that are more flexible and comfortable while fitting in the most typical shafts and buildings. Designing excellent elevators and escalators that are energy saving, space-saving and efficient are tenets we live by.

our culture

our vision

In three decades, ORBIS has become a global player, with huge national and international projects to speak for the hard work. “Our vision is to uplift the standard of vertical transportation to the next level by manufacturing and installing superior quality products for every application. We provide efficient and round the clock services to achieve a 100% customer satisfaction at an economical way. We seek to put to application the most modern techniques in an indigenous way to suit varied needs.”

“We envision our leadership in the chosen market, products and services across the globe through tireless pursue of excellence in technology, world-class research and development”

environmental responsibility

We have one planet and it is our duty to keep it safe for the future generation. So while the ORBIS family dreams of shaping cities with our elevators and escalators, there is a greater dream we hope to realize – sustainability for one and all.

Over the years, we have researched for ways to increase our efficiency while reducing carbon footprint. We consistently participate in initiatives that reduce water pollution, improve waste management and curb emissions and energy use.

Our policy is to continue to find ways to build state of the art products while curbing extensive use of energy and natural resources. We hope to leave a legacy of co-existing with nature, negating impact of our activities on the environment and on the communities in which our facilities are based.

corporate social responsibility

We don’t just believe in creating a reputation and building a brand in the international market through providing good products and services, we deeply care about the social responsibility we have towards communities that support us.

Giving back is a mantra our founders deeply believe in that is why we are associated with several charitable trusts that work for the under privileged, the disabled and the senior citizens.

Even in abroad, we are not just a business brand but are doing a significant job in lifting the standard of vertical transportation facility throughout the country. Many of our latest innovations are senior-citizen and disabled-friendly. ORBIS understands the responsibility of being a trusted name and intends to build on that goodwill.

we believe

At ORBIS, we believe that the success of our employees and of the company go hand-in-hand. We are committed to create and sustain a culture that fully leverages our employees’ talents – every one of us is heard, supported and allowed to make a difference. ORBIS values energy, ideas and the ultimate success that diversity brings to our industry, to our company and to the global organizations we serve.

Through mutual support, high-performing teams across generations of ORBIS employees, suppliers and customers are created, focussing on generating understanding of the work, recognition, workplace etiquette and knowledge transfer.

our journey

1994
ORBIS was founded.

1997
First Giant Geared Machine was installed, having a capacity of 150 persons.

2000
Became an ISO 9001 certified company for QMS.

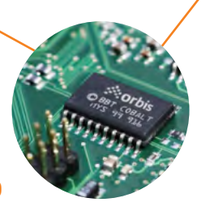
2002
Successfully executed project including hoist way structure within 48 hours for the then Prime Minister of India.

2004
Received a single order consisting of 43 units of gearless elevators and 4 units of escalators along with their after-sales service.

2005
Established another manufacturing plant in Himachal Pradesh, India.

2006
Designed first Machine room less gearless elevator.

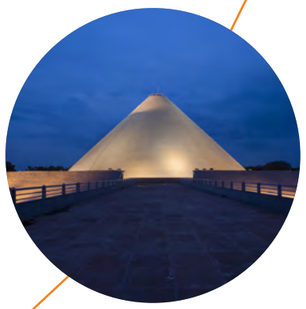
2008
Expanded business in the overseas markets after witnessing an increased demand for our products.



2010
Designed high speed control system with speed upto 8 mps that is compatible with RMS, BMS and group control.

2011
Installed high speed observation elevators for the first time in northern and western regions of India.

2013
Designed and built a new era of innovation with polyurethane belt elevator.



2015
Executed the manufacturing and installing of premium elevators in a short span of time for Mahatma Gandhi Museum.

2016
Awarded one of the largest of high speed elevators order for Asia's largest multi-specialty hi-tech hospital.

2017
Awarded a contract for India's tallest dam elevators with travel height of 123 meters.

2018
All set for the future with a new logo and slogan to reach new heights of success and to make everyone's growth story our own.

innovations

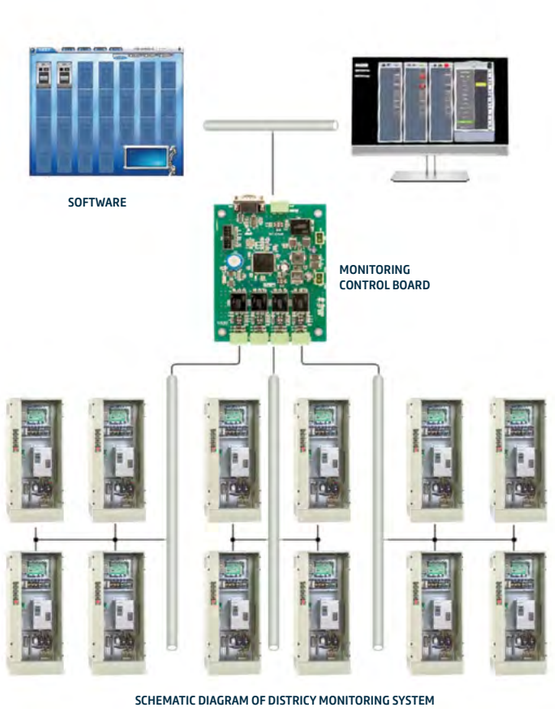
Close loop Integrated Control System

Our Integrated Control System with a close loop system has the perfect integration of control and drive of the elevator. It is designed for better performance of data transfer and reduces hoist way and machine room wiring, making it more reliable. Double 32 bit embedded microprocessor completes the elevator operation and motor drive control. It has a CAN Bus communication mode with duplex, triplex and grouping functions up to 8 lifts for high-rise buildings.

- Super compact with anti-interference ability to exceed the highest level in compliance and industrial standard
- Modern direct landing technology for higher efficiency during riding
- Surplus safety design
- An advanced no-load sensor start up compensation technology results in comfortable start without need of a weighing device
- Effectively reduces motor noise and loss of machine

Automatic Rescue Device (ARD)

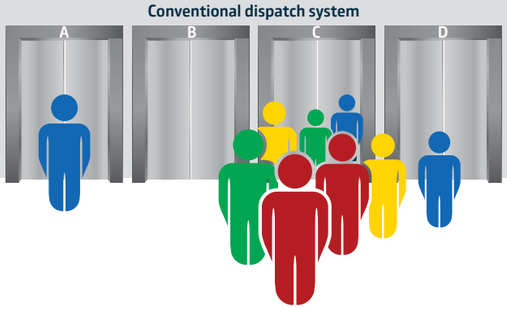
The ARD is an excellent innovation that allows elevator to function when external power supply fails. In case of power failure inside the elevator, the main board gives a command to ARD to run for the elevator to reach the nearest floor. ARD runs with charged batteries and provides emergency power supply to reach the nearest floor, helps open doors fully and move people safely. The elevator runs in normal mode after that.



SCHEMATIC DIAGRAM OF DISTRICY MONITORING SYSTEM

Remote Monitoring System

It is important to secure the safety and reliability of an elevator as accidents may lead to great casualties. That is why ORBIS has designed an elevator remote monitoring system based on the Internet of Things, which aims to obtain real-time running information of the elevator, including its running state, location and malfunction information. It generates pre-diagnose error until a service engineer reaches to resolve the same – this leads to increased customer satisfaction.



Destination Dispatch System (DDS)

DDS is a smart device that is used for multi-elevator installations in high-rise buildings where passengers are grouped for the same destination into the same elevator. It reduces waiting and travel time when compared to the traditional system. It improves the efficiency of the entire elevator system by reducing the number of total trips, stops and starts that consume the most energy, a major advantage to building owners.

Another benefit is the space saved in new constructions as efficiencies provided by this technology require fewer elevators to get passengers to their desired floors, in turn allowing more rentable space in the floor plan. DDS can be installed in new construction projects or as part of an elevator modernization

Regenerative Drive

Regenerative drives are a remarkable advancement in energy-efficient elevator technology because they recycle energy instead of wasting it as heat – when the elevator travels down with a heavy car load or up with a light car load, the traction drive machine functions as a power generator. Energy is being regenerated by the drive machine back to a building grid and feeds to the building's electrical network along with the energy from the main power supply.

Benefits

- Regenerated power can be feed into the building equipment
- Saves up to 40% energy compared to elevators without this device, decreases harmonic currents
- Reduces heat generation which helps to keep the machine room cool
- Reduces building maintenance cost

Elevator IC Card Access Intelligent System

Elevator IC card Access Intelligent System aims to provide an intelligent support for operational management of our elevators. Things like call commands, door opening controls, time bounding access and floor restrictions can all be activated by the messages inside the IC Card.

Thus operation of the elevator becomes manageable, extensible, controllable and cost-effective.

- Automatic elevator calling according to messages inside the IC Cards
- Registers car call automatically after tapping the card inside a car
- Achieves monthly, yearly and fixed number of usage times packages
- Prevents against repeated card tapping
- Accesses multiple floors with one card (suitable for multi-floor passengers)
- Accesses every floor with one card (suitable for real estate management)
- Supports VIP elevator calling function

*some of the above mentioned functions are available for premium elevators only.

Machine Room

Passenger Elevator

Orbis provides “best in class” ride quality on every equipment that we install. Machine room passenger elevator is one of most popular product in both private and public sectors.

Our MR Passenger elevator applies small bulk, is light weight and has a highly efficient and permanent magnet synchronous (PMSM) gearless traction machine placed in a very compact space. As a result, it saves up to 40% energy when compared to traditional traction machines.

The latest global invention of permanent magnet synchronous gearless traction machine effectively reduces energy consumption and saves up to 40 % energy compared to traditional geared machines, reducing building maintenance costs. Environmentally, it is free from oil pollution and has a very low noise.

As gearless PMSM machines are designed to cater to a new age in infrastructure, ORBIS' compact and sturdy design ensures superior space management in the machine room along with easy maintenance and handling of equipment.

Easy accessibility to the equipment in high rises and multi-storey buildings is essential today and this concept enhances that. Considering multiple elevators in one building or high speed elevators, proper ventilation and accessibility of machine rooms in multi-storey buildings go a long way in ease of maintenance and engineer safety.

Machine Room Less

Passenger Elevator

The Machine room-less elevator is a great leap in technology that hugely enhances the mobility experience. It is the result of years of research and technological advancement that allows a significant reduction in size of the electronic motors used with the traction machine.

MRL elevators not only look fabulous in new constructions and major renovation projects but when compared to standard elevator equipment, it saves substantial construction space and building expense. Its features include excellent reliability and durability, is oil free and operates silently.

Energy Saving
MRL elevator is backed by new age technology of permanent magnet synchronous gearless traction machine that reduces energy consumption and saves up to 40 % energy compared to traditional machines.

Compact Design
Our light-weight MRL elevators are smartly designed to meet the expectation and flexibility of contemporary architecture.

Construction Cost Saving
With no requirement of machine room, the elevator control system can be fixed at the last stopping or within the elevator shaft without taking additional space. This reduces construction costs and increases space utilization.

Flexible to building design
Machine room less elevators open an entire horizon of trendy, flexible building designs. Without a machine room, architects and designers can play around with space using options.

nexus175

Low-Mid Rise Passenger Elevator

Nexus175 Passenger Elevator is smartly designed to meet the needs of a thriving urban landscape. Perfect to serve low and mid-rise residential and commercial buildings, Nexus175 combines standard elevator technology with great design along with an array of optional features.

We at ORBIS suggest the Machine room less concept to help customers save energy, space and increase flexibility. With the integration of PMSM gearless traction machine into the model and a highly efficient close loop control technology, Nexus175 is as good as its name, linking several floors seamlessly.

coverage

Speed: 1.0 to 1.75 mps
Duty: Up to 1768kg
Stops : Up to 16 Stops

Ceiling: Hairline Stainless Steel with LEDs and Blower Fan
Walls: Hairline Stainless Steel
Floor: Black Sparkle Granite
COP: OES-120 (Half Length)
Handrail: Single Round 38 Ø mm Steel finish

rapid 400

High rise Passenger Elevator

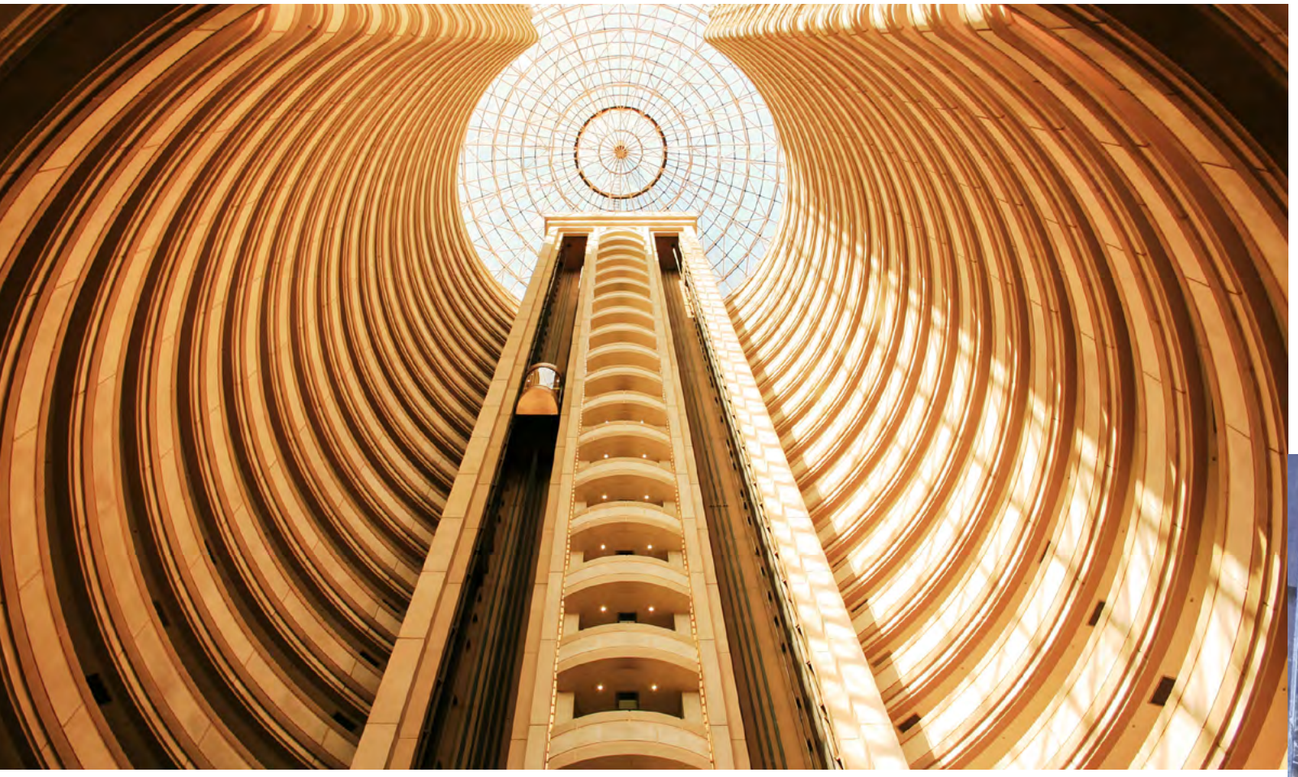
The Rapid400 is a fast moving passenger elevator with speeds upto 4mps, a perfect mobility solution for high-rises and multinational companies. Available in the early to premium elevator range, it comprises of a double 32 bit embedded close loop microprocessor fusion control system. A PM auto door for cabin and landing doors gives better comfort and safety while the designs are easily customizable. The Rapid400 is highly recommended with a machine room for better maintenance of equipment.

Rapid400 can effortlessly sync with the building management system.

coverage

Speed: 1.5 to 4.00 mps
Duty: Up to 1768kg
Stops: Up to 64 Stops (Up to 8.0 mps)
Grouping: Up to 8 Elevators

Ceiling: Hairline Stainless Steel finish and Mirror Stainless steel finish with LEDs and Blower Fan
Walls: Hairline Stainless Steel Finish, Red colour back painted Glass and Backside Mirror Glass
Floor: Black Sparkle Granite
COP: OES-260 (Half Length)
Handrail: Double Round 22 Ø mm Steel finish



trans500

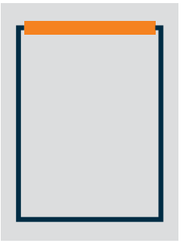
Panoramic Elevator

The Trans500 Panoramic Elevator is a jewel worthy of prestigious buildings. Its design and features aim for optimum travel comfort. ORBIS has years of specialized knowledge in capsule elevators and so it offers a wide range with ultramodern designs. Trans 500 Panoramic elevators come with speeds upto 2.5 mps along with capacities of upto a whopping 26 persons. Its technical prowess lends to a silent and reliable operation while the VVVF microprocessor based controller provides a smooth and jerk free run and landing. Oil buffer and roller guide shoe give vibration-free travel while aesthetic interiors like a panoramic glass viewing panel makes it visual hit.

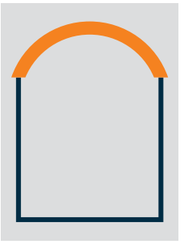
coverage

Speed: 1.0 to 2.5 mps
Duty: Up to 1768kg
Stops: Up to 20 Stops

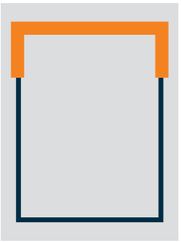
Ceiling: Hairline Stainless Steel finish with LEDs
Walls: Hairline Stainless Steel Finish and Observation Glass
Floor: Jirawala Granite
COP: OES-180 (Full Length)
Handrail: Single Round 38 Ø mm Steel finish in wall and floor



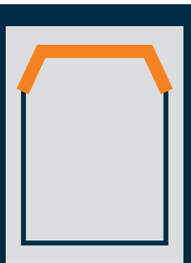
Rear Side



Semi Circle



3 side square



3 side Cutting edge

5 side Cutting edge

coverage

Speed: 1.0 to 2.5 mps
Duty: Up to 1768 kg
Stops: Up to 30 Stops

coral700

Passenger Elevator

Energy Efficient

1 coral700
2
3
4
5

Coral700 is a top notch in its category. Just as the name suggests, this belt driven passenger elevator model slithers along, making the transit smoother, faster and without any obstructions. The flat, steel-coated belt eliminates the metal to metal effect of conventional systems.

Compared to rope elevators, belt requires a small radius for bending and is compatible with small gearless machines that fit in hoist ways with minimum overhead. This reduces building and system operation costs.

Long-lasting flat belts, smooth crowned sheaves and minimum moving parts reduce wear and increase durability and efficiency. ORBIS has also designed a safety belt check device that is fixed on the belt and directly connects to the controller – it gives feedback to the logic board to prevent damage.

Belt Driven Gearless Machine

- 70 % Smaller then conventional ones.
- Very compact & efficient.
- Up to 40 % Energy Saving.

Flexible Polyurethane Steel Coated Belt

- Increase design flexibility.
- 20 % Lighter with smaller bending radius.
- Durability 10 millions times in 15 years.

Oil Free Roller Guide Shoe

- Spring-loaded ensuring superior ride comfort.
- Uniform design concept.

Lubrication Free Product

- No oil used in entire equipement
- Dirt Free Area

Energy Regenerative Drive

- Regenerating electricity back to power grids
- Reducing energy consumption

Belt Moniter Device

- Real time checking the safety of the belt
- connected to safetty circuit
- make maintanance more efficiant & easier

kangaroo lite

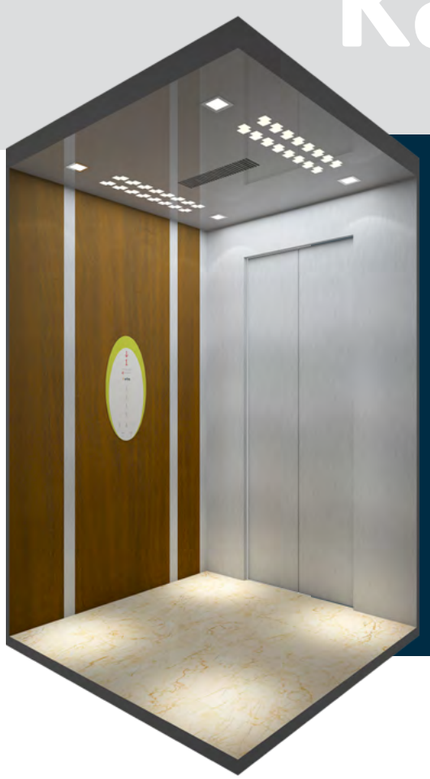
Home Elevator

OPB 300

SOP 300

OPW 400

SOP 400



One of ORBIS' best, the Kangaroo Lite is an ode to the namesake animal that carries its offspring within its body. With great attention to detail, Kangaroo Lite is designed to meet vertical mobility in home or private buildings for people who have special needs, like senior citizens or the disabled. A modern product catering to easy mobility like short trips from garage to roof (up to 4 floors), this home elevator consumes 40% lesser power than hydraulic elevators, is noiseless and vibration-free. It requires a single phase power supply to run and with little overhead space and pit area requirements, this model is easy on the building as well.

Main Features and benefits:

- Runs with single phase power supply
- Requires very compact overhead space and pit area
- Saves up to 40% energy compared to hydraulic elevator
- Noiseless and Vibration free
- Easy to install and maintain

coverage

Speed: 0.3 to 1.0 mps
Duty: Up to 340 kg
Stops: Up to 4 Stops

Ceiling: Mirror Stainless Steel finish with LEDs with blower fan
Walls: Wooden Pre coated Steel Finish, Mirror Stainless Steel Finish, and Mirror Glass
Floor: PVC Marble
COP: OPW – 400 (White Perrot Oval Touch)
Handrail: Single Round 38 Ø mm Steel finish

impulse108

Hospital Elevator

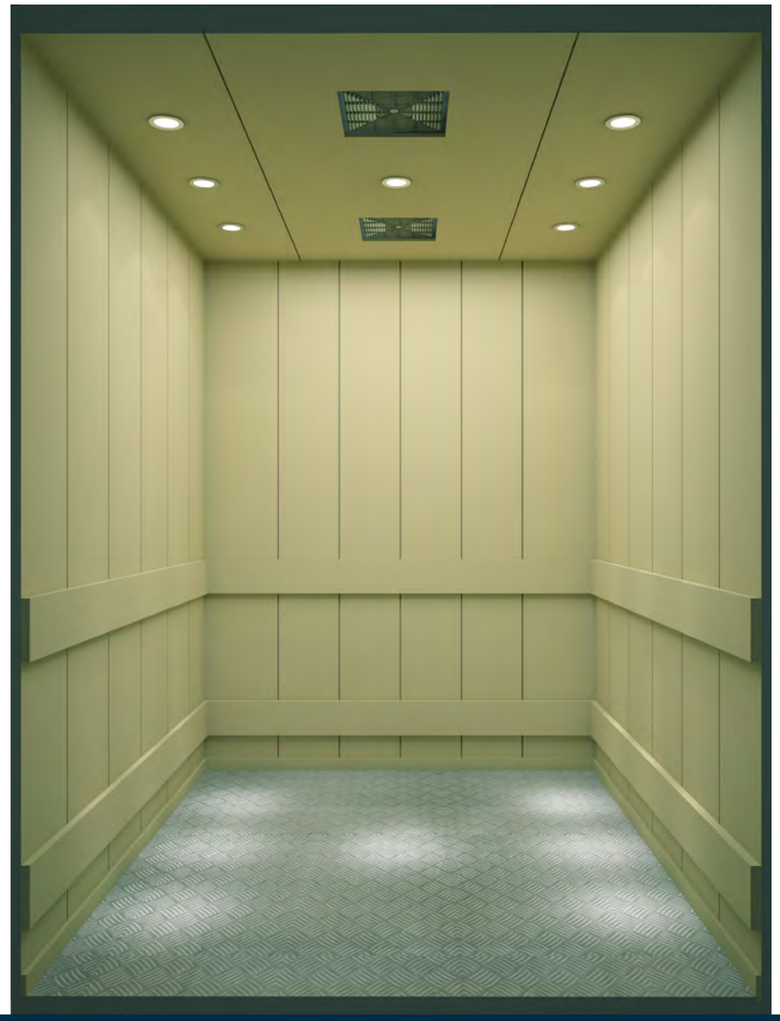
Impulse 108 is the best stretcher elevator of 15, 20 and 26 person capacity in the market today. Available at various speeds that help serve the masses during emergency transportations at hospitals and medical institutes, it is very spacious and has a proper exhaust system with a jerk free landing. Impulse 108 is designed to transport bulky and heavy hospital equipment and its robust built has a versatile automatic control system that permits attendant operation.

Lives are saved by the minute in hospitals and our feature of Emergency Control System makes the process even more reliable. Additionally, our Automatic Rescue Device is great for hospitals where power failure or emergencies can create havoc within seconds.

coverage

Speed: 1.0 to 2.5 mps
Duty: Up to 1768 kg
Stops: Up to 64 Stops

Ceiling: Hairline Stainless Steel with LEDs and Blower Fan
Walls: Hairline Stainless Steel
Floor: Jirawala Granite
COP: OES-260 (Half Length)
Handrail: Single Round 38 Ø mm Steel finish with Safety Guard(Optional)



polarF

Freight Elevator

ORBIS' complete range of freight elevators of different load carrying capacities makes handling of goods easy. Innumerable corporates and industrial giants have installed our Polar F freight elevators for maximizing their production capacity. This heavy duty model is specially designed to fulfill industrial requirements having resistivity features like dust, fire, chemical, water and weather.

It is a known fact that sturdy freight elevators increase material handling volume thereby increasing revenue. And Polar F, just like the animal it borrows its name from, is the mightiest in this domain.

coverage

Speed: 0.25 to 1.5 mps
Duty: Up to 10,000 kg
Travel: Up to 150 Mtr.

Ceiling: M.S. powder coated (Siemens Grey) with LEDs and Rotor Fan
Walls: M.S. powder coated (Siemens Grey)
Floor: Aluminium Chequer Plate
COP: OES-120 (Half Length)
Safety Guard: Hairline Stainless Steel dual Safety Guard(Optional)

polarD

Dumb waiter

ORBIS offers dumb waiter of different ranges for service oriented organizations like hotels, hospitals and banks among others. Polar D, our top selling dumb waiter provides fast handling of food, clothes or other inanimate materials through easy operation via a tailor-made control system. This sturdy model is a time saving, economical wonder for the service industry, both big and small.

Applications

- Restaurants
- Hotels
- Hospitals
- Banks
- Industry

coverage

Speed: 0.25 to 0.75 mps
Duty: 100 kg to 250 kg
Stops: Up to 18 Stops

rivaz0

Car Elevator

With automobile elevators becoming an urban necessity, the Rivaz 0 Car Elevator is a model that helps solve the great parking predicament. ORBIS has used advanced technology to design large cabin sizes and wide door openings in the Rivaz 0 to make entering and exiting easier for the car driver. It is configurable with the access control system restricted to only building owner or users. A product a high-rise today cannot simply do without.

coverage

Speed: 0.25 to 0.75 mps
Duty: 2500 kg

ceiling

HFC-1001

HFC-1002

HFC-1003

HFC-1004

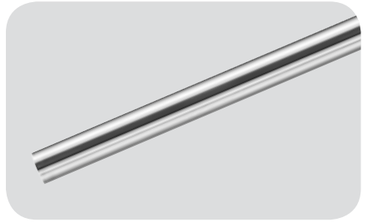
HFC-1005

HFC-1006

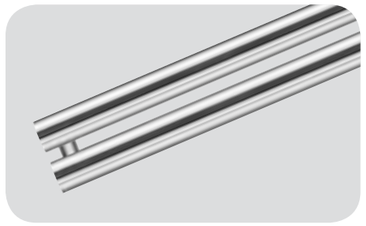
HFC-1007

HFC-1008

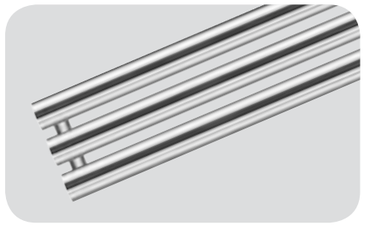
handrail



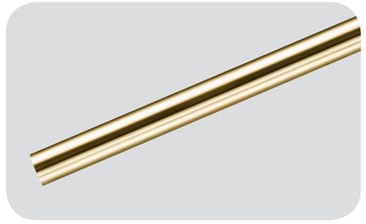
HR-001
S.S. Single Round



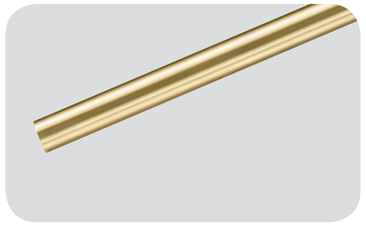
HR-002
S.S. Double Round



HR-003
S.S. Triple Round



HR-004
Gold S.S. Glossy Round



HR-005
Gold S.S. Satin Round

HR-006
Flat Solid Rectangle

*Actual product might differ from pictures

doors

LDB-A1
S.S. Center Opening Door

LDB-A2
S.S. Side Opening Door

LDB-A3
S.S. Small Vision Door

LDB-A4
S.S. Full Vision Glass Door

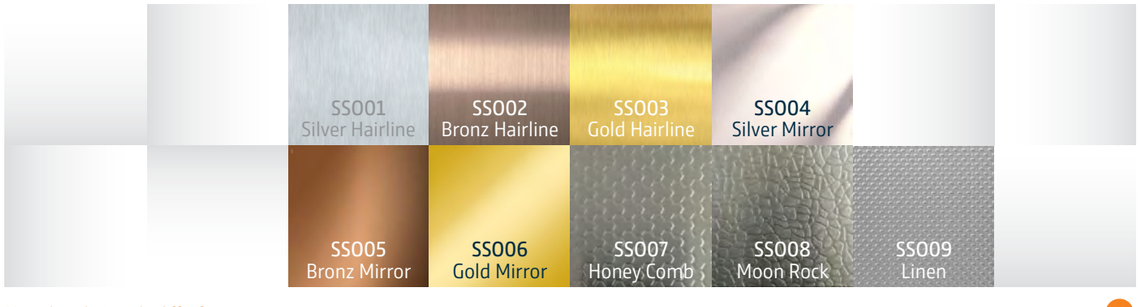
LDB-A5
S.S. Frameless Glass Door

LDB-A6
M.S. Pre Coated Door

LDB-A7
M.S. Powder Coated Door

*All doors are shown with broad door frame. (Optional)

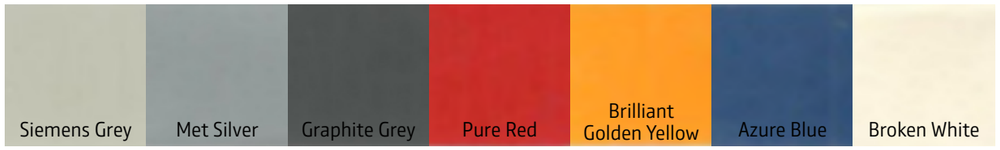
stainless steel



*Actual product might differ from pictures

pre coated steel

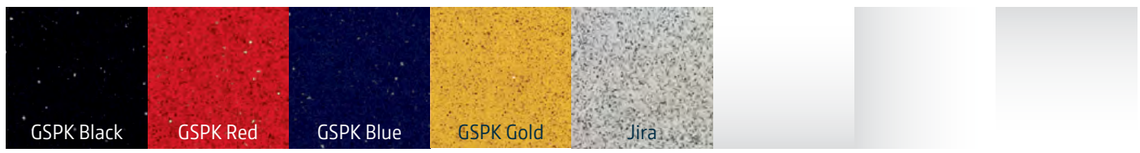
powder coated steel



flooring

Anti Skid PVC

Granite



Chequered Plate (Anti Skid)

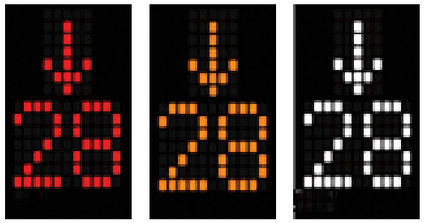
*Actual product might differ from pictures

COP & LOP

*Actual product might differ from pictures

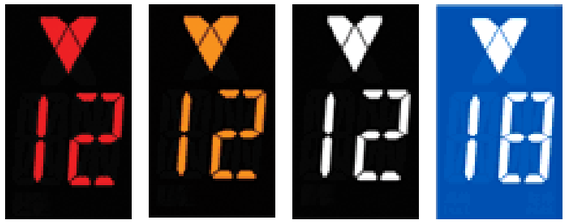
display

Square dot matrix display

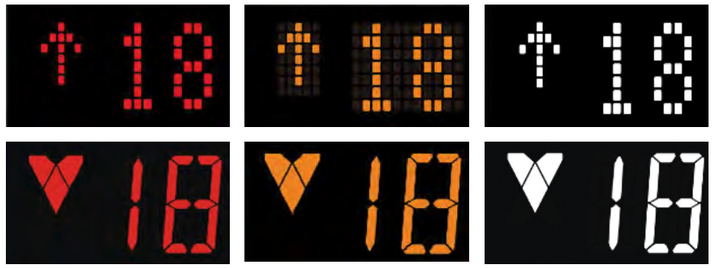


Red Orange White

LCD Display



Red Orange White Blue Background



TFT display

7” LCD TFT Car Display

10” LCD TFT Car Display

Hall position indicator

Fireman’s switch with On-Off Switch

Fireman’s switch

push button

EB210A

EB410A

PB31D

PB33D

PB37

PBC12

arrival lantern

AL 240

AL 220

AL 230

Lighting Colors Available

- Bright Yellow
- Fashion Orange
- Ruby Red
- Ivery White
- Ocean Blue
- Jade Green

*Actual product might differ from pictures

elevator features and functions

Auto Run	When there is no elevator operator, the elevator will run according to call register by passenger.	S
Attendant Run	Elevator is operated by attendants that press car calls as requested by passenger and the elevator will run to the destination floor.	S
Independent Run	During which elevator overlooks all landing calls and the automatic door-closing is absent. Other features are similar to Attendant Run.	O
Parking	When On/Off Parking key is turned off, the elevator will enter into parking mode and it will not respond to any landing calls.	O
Auto Adjustment of door opening time	According to the difference between car and landing call, it will automatically adjust the door opening time.	S
Reopen with hall call	When door is closing, door can be reopened by pressing hall button at same floor.	S
Light Curtain Protection	If any objects or obstruction comes in between doors, doors will reopen or remains open until it get clear.	S
Wrong Call Cancel	If passenger presses the wrong floor button in car, pressing the same button again will cancel the wrong register.	O
Anti-Nuisance	To avoid no-load operation, COP cancels exceptional commands through logical judgment on load so as to prevent to prank and incorrect car commands.	O
Door Nudging	If the elevator keep door opening than the fixed door open time due to light curtain or other reason, elevator doors closing at slow speed with buzzer sounding.	O
Overload Stop	When the elevator is overloaded, the elevator door keeps opening, buzz rings and the elevator stops at current floor.	O
Inspection Operation	When elevator enters into inspection mode, car run in jog state.	S
Fault Self – diagnosis	Control system can record fault in memory to facilitate the fault elimination and restore elevator in to running.	S
Auto-landing with Fault	When any fault occurs and safety circuit is ok, the elevator will reach to the nearest floor.	S
Over Travel protection	The device can efficiently prevent from the elevator’s surging to the top or knocking the bottom when it is out of control, which makes elevator more safe and reliable.	S
Over Speed Protection	When the elevator’s downward speed is higher than rated speed, the device will cut off electrical control source to stop the motor running. And the safety gears will force the elevator stop in order to ensure the safety.	S
Safety Circuit Protection	If any safety circuit or contacts are loose, elevator will stops running at once.	S
Door Interlock Protection	When doors are closed and contacts are in circuit, the elevator can run. Improper interlock of door contacts will not allow elevator to run.	S
Main Contactor Protection	System detects if the main contact acts reliably, if any abnormity is detected, the elevator will stops running.	S
Repeated door close	On normal mode, after running door close command, if door inter-lock circuit isn’t connected, elevator opens door and closes it again.	S
No Stop Floor Set	Unwanted floor can be disabling to the customer’s requirement.	S
Waiting Floor Set	Set waiting time according to the customer’s requirement.	O
Emergency Lighting	Emergency car light will automatically on when power failure.	S
Home Landing	Any one floor can be identify as a home landing for elevator as an ideal position.	S
Intercom System	Communication aimed between car, car top, machine room, pit and rescue control room through intercom instrument.	S
Alarm Bell	In Emergency condition, if alarm bottom on car panel is constantly pressed, electronic bell will ring for rescue.	S
Auto Cut off Light and Fan	If there is no car or landing call in present time, car lights and fan will automatically turned off after some time.	S
Fire Emergency Return	In case of fire emergency, all landing calls are cancelled and elevator runs to the present floor and opens door automatically.	S
Group Control System	This function is for two or up to eight lifts in group to reduce waiting time and improve equipment’s efficiency.	O
Dual Car Operation Panel	It is recommended for crowded passenger to building or for more than one car opening / reverse opening car doors.	O
Door Shut Delay	Pushing the special button in car can hold the door open for a period.	O
Automatic Rescue Device	When power is off, this device will supply power to elevator and elevator run to the nearest floor, open the doors and rescue the passengers.	O
IC Card System	All floors and Elevator car need approval to run and IC card can run elevator.	O
Arrival Charm /Lanterns	Arrival Charm rings and an arrival lantern indicates the particular elevator landing.	O
Voice Announcement System	It gives audio announcement to floor level, different modes of elevator and special instruction preprogramed on customer’s requirement.	S
Pre-Opening System	When approaching to Landing door area, the elevator opens the door in advance under safe condition and move to levelling position at low speed.	O
RMS/BMS System	Computers carry out remote monitoring system. This function can provide computed monitoring for all the elevators and feedback to the computed management of the building.	O
Earth quake Return	When earth quake occurs, earth quake sensors detect it and send signal to control system and it instruct the running elevator to park at nearest floor and door will remain open for passenger evacuation as well as stop the elevator then.	O

* As per model, floors, capacity and speed, standard and optional function can be vary. Company reserves the rights to add, remove or modify any of the above features without prior notification.

Note: Standard (S) , Optional (O)

Escalator

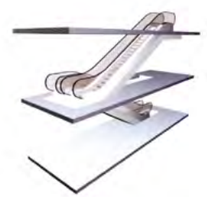
roto 35
roto 30

Escalators and Moving walks; most sophisticated solution for mass transportation

In the modern world, the only invention committed to reduce human traffic in various new architectonics like airports, shopping malls, multiplexes, railway stations and many other areas is elevators, escalators and moving walks. For thousands of locations where the transportation considered is through escalator and moving walks. It has become a necessary application as being ideal to human flow.

The technology of escalator and moving walks has raised comfort with Safety for large horizontal and vertical transportation at various locations. Escalators and moving walks are playing the most important role making it a necessity in the new era.

Single



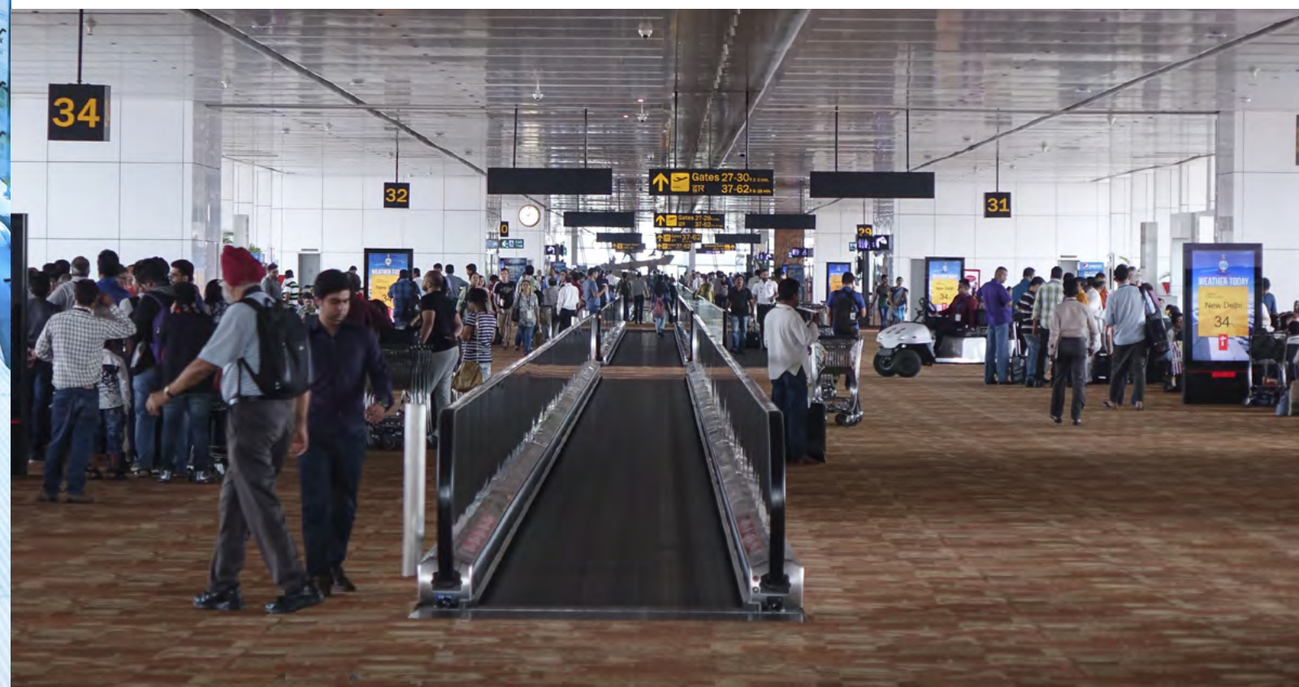
Continuous

Parallel

Crisscross

Moving walk

roto 0



advanced technology

- Newly designed VVVF drive makes escalator and moving walk be a representation energy saving product. By checking the traffic flow timely by means of photo electric sensor located at the entrance of escalator, achieving auto moving with great energy saved.
- The safety protection functions as many as 21 items fully comply with International standard.
- Handrail system in stainless steel reflects noble style with its 180° arc end and black inlet.
- Most advanced control system and driving device, superior driving chain, excellent workmanship assures the safe, reliable and stable operation.
- Automatic lubrication system lubricates all kinds of driving components, which prolongs product's operation life greatly.
- Micro-computer controlled system performance with rapid calculation speed, high reliable moving, and also with failure code fixed, easy to be maintained.

ROTO 35, ROTO30 Escalator's maximum rise is up to 7.5 meters.

Specification

Application	ROTO 35	ROTO 30	ROTO 0
Rise H (m) Horizontal Span (Roto 0)	≤6	≤7.5	≤150
Inclination (°)	35	30	0–6
Step Width(mm)	600/800/1000		800/1000
Horizontal/Pallet Steps	2	2 or 3*	-
Speed (m/s)	0.5 (S) 0.65 (O)		
Main Power	380V / 50Hz/3P		
Balustrade	Tempered Glass 10 mm		
Handrail bracket	Stainless Steel		
Handrail	Black (S) Green, Red, Yellow, Blue(O)		
Balustrade Height	900 mm (S) 1000mm (O)		
Inner, outer Decking	Hairline Stainless Steel		
Skirting	Hairline Stainless Steel		
Step or Pallets	Stainless Steel (S), One-piece aluminium (O)		
Landing plate	Stainless Steel (Anti-Skid), Aluminium alloy(Anti-skid) (O)		
Illumination	Lighting under upper & lower landing steps Skirting lighting, Comb lighting, Handrail lighting (O)		
Indicator	Failure code indicator on control cabinet Indication on outer decking (O) Running Direction indicator on outer decking (O)		
Energy control	VVVF (O)		
Operation	Emergency Stop button, Key Switch, Inspection Operation		
Heating Device	To Heat the escalator ladder road (O)		

Note: Standard (S) , Optional (O)

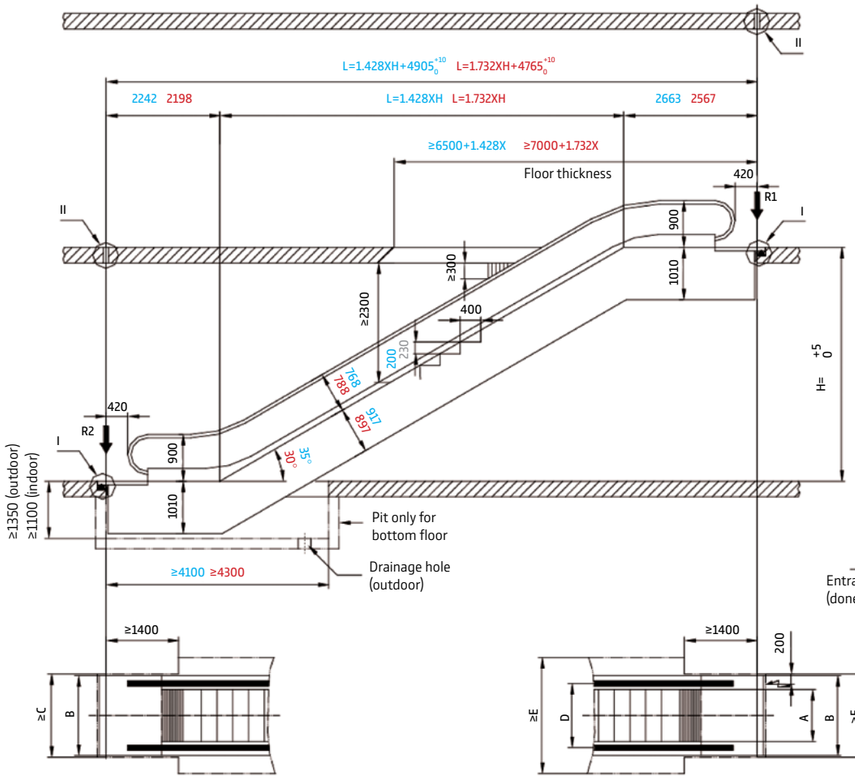
Safety features and functions

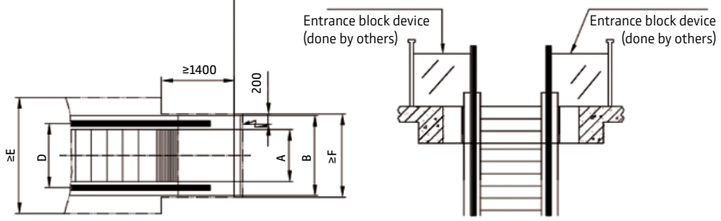
1	Static electricity protection of step or pallet	Eliminate static electricity raised from running of the steps or pallets	S
2	Static Electricity Protection of handrail	Eliminate static electricity raised from running of the handrail.	S
3	Emergency Stop button on entrance	Push the emergency stop button to stop the escalator or moving walk against emergency situation.	S
4	Handrail entry safety protection	Protection against risk of the miscellanies being jammed into handrail entry.	S
5	Over speed Protection	Protection against risk of speed being over 20% of the rated speed.	S
6	Under Speed Protection	Protection against risk of speed being less than 20 % of rated speed.	S
7	Unintentional reversal protection	Protection against risk of unintentional reversal of the direction of travels.	S
8	Phase Failure Protection	Protection against risk of phase failure.	S
9	Short Circuit Protection	Protection against risk of short circuit.	S
10	Overload Protection	Protections against risk of motor continually overload.	S
11	Step or Pallet loss Protection	It stops when it monitors the step or pallet loss.	S
12	Step or Pallet sagging protection	Protection against risk of steps or pallets being breakage and sagging.	S
13	Step or Pallet chains safety protection	Protection against risk of steps or pallets being breakage of undue elongation.	S
14	Comb Safety Guard	Protection against risk of the miscellanies being trapped at the comb.	S
15	Inspection Socket	To Provide voltage to inspection or maintain.	S
16	Machine room guard	One safety plate separates machine room from movable parts such as step to protect service personnel.	S
17	Emergency Stop button on control cabinet	Push the emergency stop button to stop the escalator or moving walk against emergency raise when inspection and maintaining.	S
18	Handrail speed-detection protection	When handrail speed is 15 % lower than the step or pallet speed, it stops in fixed limited time.	S
19	Brake over-distance protection	When the step or pallets brake distance is 1.2 times larger than the stipulated distance, it prevents from start again.	S
20	Skirting Guard	Protection against risk of any objects being jammed into clearance between steps or pallets and skirting.	S
21	Floor anti-start Protection	It stops when the floor plate is removed or opened.	S
22	Main Drive chains safety protection	Protection against risk of drive chains being breakage or undue elongation.	S
23	Skirting Brush	Brushes on skirting to enhance the passenger's safety	S
24	Host brake detection	When it detects the release condition of the host brake, it prevents from start before its release.	S
25	Anti-crawl device	It prevents the passengers from crawling to external handrail.	O
26	Anti-skid device	It installs outer cover plate which is closed to handrail height. It prevents the passengers from accidental crawl, skid or fall.	O
27	Arrester	It prevents passengers from entering in to the area between wall and handrail, between two escalators or moving walks	O
28	Protection baffle	Protection baffle is set in the crossing of outer handrail edge and any obstacle.	O
29	Auxilliary brake	When it exceeds 1.4 times of the speed; the step or pallets and handrail running direction is opposite to the indicated direction, auxiliary brake stops the escalator or moving walk.	O

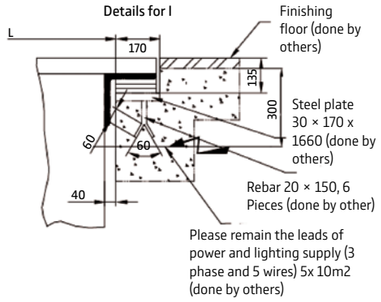
* As per model, standard and optional function can be vary. Company reserves the rights to add, remove or modify any of the above features without prior notification.

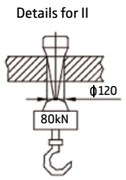
Note: Standard (S) , Optional (O)

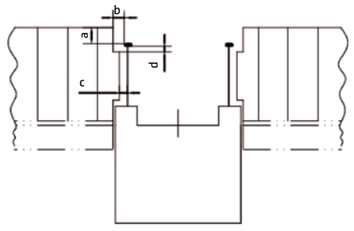
roto 35 & 30 escalator construction parameters











Reaction force & power

Step width		600		800		1000		Remark
R1(kN)		3.5 x L+15.5		4 x L+17		4.5 x L + 18.5		L measured by M
R2(kN)		3.5 x L+10		4 x L +11		4.5 x L + 11.5		
Rise		3000	3500	4000	4500	5000	5000	6000
Motor Power	1000	5.5 kw		8kw		11kw		
	800	5.5 kw		8 kw				
	600	5.5 kw						

Note	Specification	
1. The drawing applies to civil construction of single arrangement moving walk with H≤7.5m and below. 2. Size measured by mm, some size may be changes subject to change without prior notice. 3. Upper end of truss should be extended for 417mm once step width 600mm chosen.	Type	Roto 35 / Roto 30
	Speed	0.5 m/s
	Horizontal Span (L)	≤7.5mm
	Inclination	35° / 30°
	Supporting force R1,R2	kN
	Power supply	380V, 50Hz, 3P AC
	Lighting supply	220V, 50Hz, 1P AC

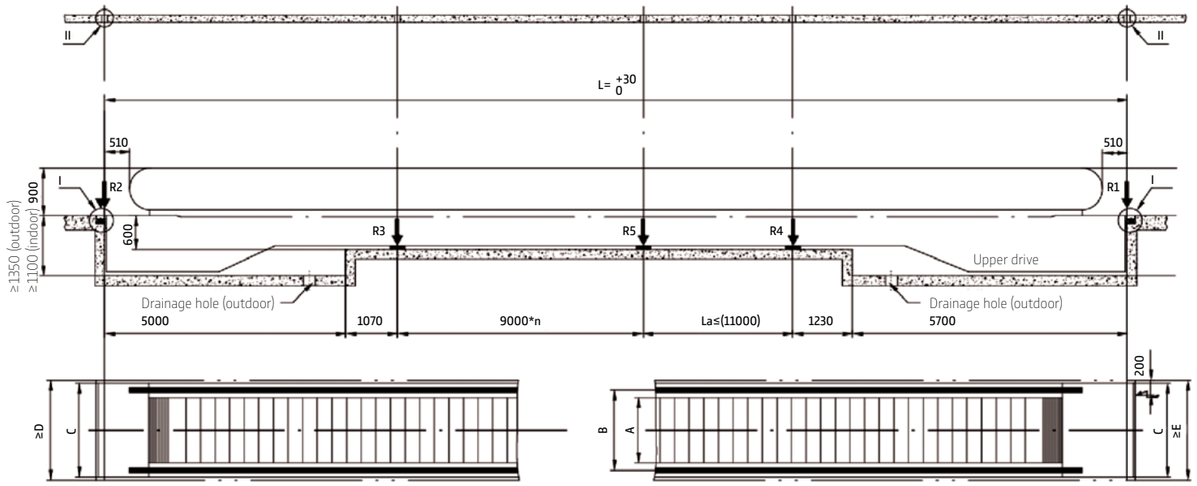
Dimension for ROTO 35 Dimension for ROTO 30

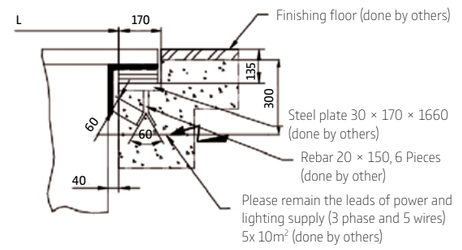
A	B	C	D
≥ 100	80 ~ 120	≤ 120	25 ~ 100

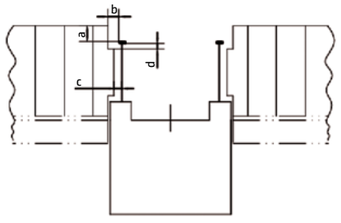
Standard specification and size

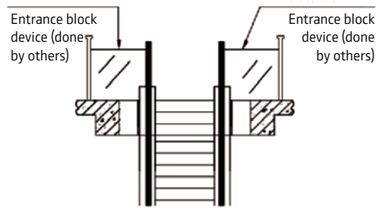
Escalator External Width	A	600	800	1000
Escalator External Width	B	1150	1350	1550
Civil opening width	C	1260	1460	1660
Distance between handrail centres	D	838	1038	1238
Civil opening width	E	1838	2038	2238
Civil opening width	F	1260	1460	1660

roto 0 moving walk construction parameters









A	B	C	D
≥ 100	80 ~ 120	≤ 120	25 ~ 100

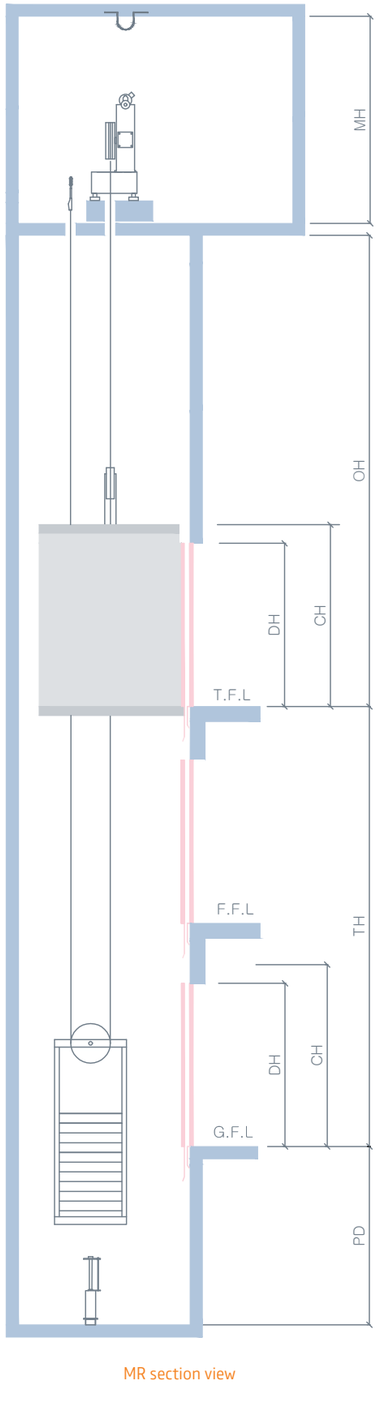
Pallet Width	800	1000	Pallet width	800	1000
R1	32kN	36kN	A	800	1000
R2	31kN	33kN	B	1100	1310
R3	49kN	55kN	C	1400	1600
R4	50kN	57kN	D	1460	1660
R5	43kN	51kN	E	1460	1660

Note	Specification	
1. The drawing applies to civil construction of single arrangement moving walk with L≤150m and below. 2. Size measured by mm, some size may be changes subject to change without prior notice.	Type	Roto 0
	Speed	0.5 m/s
	Horizontal Span (L)	Up to 150mm
	Inclination	0°
	Supporting force	
	R1,R2,R3,R4,R5	kN
	Power supply	380V, 50Hz, 3P AC
	Lighting supply	220V, 50Hz, 1P AC

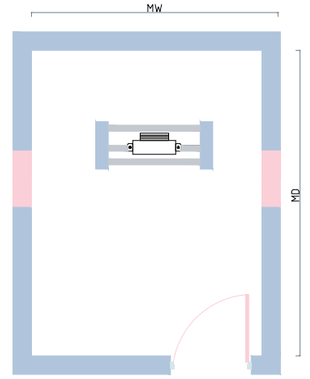
planning guide for MR elevator

Model	Capacity		Car		Door			Shaft		Machine Room			Speed	Pit	Overhead
	Persons	Kg.	Width (CW) mm	Depth (CD) mm	Opening (DO) mm	Width (DW) mm	Height (DH) mm	Width (SW) mm	Depth (SD) mm	Width (MW) mm	Depth (MD) mm	Height (MH) mm	m/s	Depth (PD) mm	Height (OH) mm
Nexus 175 / Rapid 400	6	408	1100	1000	CO	700	2000(S) 2100(O) 2200(O) 2300(O) 2400(O)	1700	1650	2900	3650	2600	Up to 1.5	1600	4800
					SO	800		1900	1450						
	8	544	1300	1100	CO	800		1900	1750	3100	3700				
					SO			2100	1550						
	10	680	1300	1350	CO	800		1900	2000		4000		Up to 1.75	2100	5000
					SO			2100	1800						
	13	884	2000	1100	CO	900		2600	1750	3800	3750				
					SO			2800	1550						
	16	1088	2000	1300	CO	1000		2600	2000		4000		Up to 2.5	2200	5200
					SO			2850	1750						
	20	1360	2000	1500	CO	1000		2600	2200		4200				
					SO			2850	1950						
	26	1768	2200	1750	CO	1200		2800	2450	4000	4450				
					SO			3050	2200						
Rapid 400	13	884	1600	1400	CO	900	2100(S) 2200(O) 2300(O) 2400(O)	2400	2200	3800	3750	2800	Up to 4.0	3400	5600
	16	1088	1500	1750		1000		2300	2550		4000				
	20	1360	1750	1750		1000		2550	2550		4200				
	26	1768	2000	1950		1200		2800	2750	4000	4450				
Trans 500 3 side Cutting edge	8	544	1100	1400	CO	800	2000(S) 2100(O) 2200(O) 2300(O) 2400(O)	2100	1300	4100	3300	2600	Up to 1.75	2600	5000
	10	680	1350	1400		800		2400	1300	4400	3300				
	13	884	1350	1700		900		2400	1600	4400	3600				
	16	1088	1600	1700		1000		2600	1600	4600	3600				
	20	1360	1600	2000		1000		2800	1900	4800	3900				
5 side Cutting edge	13	884	900	2100		800		2700	2800	4700	5300				
	16	1088	1100	2200		1000		3000	3000	5000	5500				
Impulse 108	15	1020	1000	2400	CO	800	2000(S) 2100(O) 2200(O) 2300(O) 2400(O)	1900	2900	3100	4900	2600	Up to 1.5	1600	4800
					SO	900									
	20	1360	1300	2400	CO	900		2200	2900	3400	4900		Up to 2.5.	2200	5200
					SO	1200									
	26	1768	1600	2400	CO	1000		2500	2900	3700	4900				
					SO	1200									
Polar F	-	500	1100	1200	CO	800	2000(S) 2100(O) 2200(O) 2300(O) 2400(O)	1900	1700	3100	3700	2600	0.25 to 1.00	1600	4800
					SO	900									
		1000	1400	1800	CO	1000		2300	2300	3500	4300				
					SO	1200									
		1500	1700	2000	CO	1000		2600	2500	3800	4500				
					SO	1200									
		2000	1700	2500	CO	1000		2600	3000	3800	5000				
					SO	1200									
		2500	2000	2500	CO	1200		2900	3000	4100	5000				
					SO	1500									
		3000	2000	3000	CO	1200		2900	3500	4100	5500				5000
					SO	1500									
		4000	2500	3000	CO	1500		3400	3500	4600	5500				
					SO	1800									5200
		5000	2500	3600	CO	1500		3400	4100	4600	6100				
					SO	1800									
Polar D	-	100	700	700	V0	700	800	1400	1000	-	-	-	0.25 to 0.70	750	3600
		150	800	800		800	900	1500	1100						
		200	900	900		900	1000	1600	1200						
		250	1000	1000		1000	1200	1700	1300						
Rivaz 0	-	2500	2500	5300	CO 4P	2400 (00)	2300	3900	5800	3900	7800	2800	0.50	1800	5000
		2500	2500	5300		2400 (RO)			6100		8100				

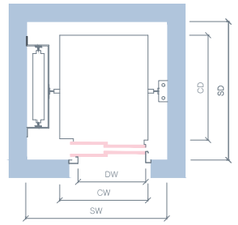
construction layout for MR elevator



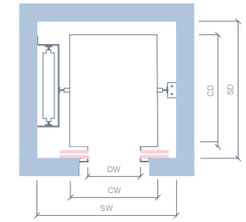
MR section view



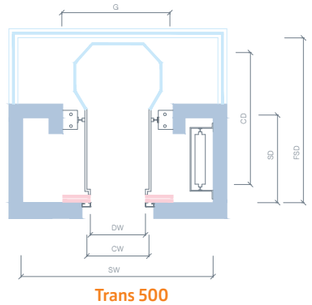
Machine-Room Plan



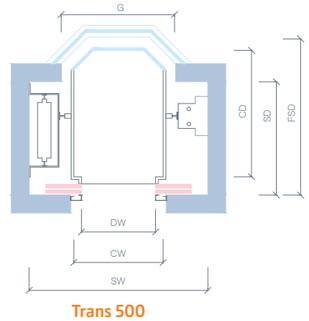
Side Opening Door



Center Opening Door



Trans 500
5 side cutting edge



Trans 500
3 side cutting edge

Model	Person	8	10	13	16	20
Trans 500 3 side cutting edge	FSD	2200	2200	2500	2500	2800
	G	1400	1650	1650	1900	1900
Trans 500 5 side cutting edge	FSD	-	-	2800	3000	-
	G	-	-	1600	1700	-

- These are Standard dimensions. It can be vary according to customization. For more details contact to orbis representative near to your location.
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- All dimensions are in MM only.
- The tolerance of perpendicular line over the whole hoist way height must not exceed ±30mm.

Standard (S)	Optional (O)	Centre Opening (CO)	Side Opening (SO)	Vertical Opening (VO)	Centre Opening 4 Panel (CO4P)	Reverse Opening (RO)	Car Height (CH)
Car Width (CW)	Car Depth (CD)	Door Opening (DO)	Door Width (DW)	Door Height (DH)	Shaft Width (SW)	Shaft Depth (SD)	M/C Room Width (MW)
M/C Room Depth (MD)	M/C Room Height (MH)	Meter per secound (m/s)	Pit Depth (PD)	Overhead Height (OH)	Wall Opening (G)	Finished Shaft Dept (FSD)	Travel Height (TH)

planning guide for MRL lifts

Model	Capacity		Car		Door		Shaft		Speed	Pit	Overhead
	Persons	Kg.	Width (CW) mm	Depth (CD) mm	Opening (DO) mm	Width (DW) mm	Height (DH) mm	Width (SW) mm	Depth (SD) mm	m/s	Depth (PD) mm	Height (OH) mm
Nexus 175	6	408	1100	1000	CO / SO	700	2000 (S) 2100(O) 2200(O) 2300(O) 2400(O)	1950	1450	Up to 1.5	1600	4350
	8	544	1100	1300	CO / SO	800		1950	1750			
	10	680	1300	1350	CO / SO	800		2150	1800			
	13	884	2000	1100	CO / SO	900		2850	1550			
			1600	1400				2450	1850			
			1400	1600				2250	2050			
	16	1088	2000	1300	CO / SO	1000		2900	1750			
			1500	1750				2400	2200	1.75	2100	4500
	20	1360	2000	1500	CO / SO	1000		2900	1950			
			1750	1725				2650	2200			
			1600	1900				2500	2350			
Coral 700	5	340	1000	950	CO	700	2000 (S) 2100(O) 2200(O) 2300(O) 2400(O)	1700	1400	Up to 1.5	1600	4100
	6	408	1100	1000	CO	800		1800	1450			
	8	544	1100	1300	CO	800		1800	1750			
	10	680	1300	1350	CO	800		2050	1800			
	13	884	1600	1400	CO/SO	800/900		2350	1850			
	16	1088	1500	1750	CO/SO	900/1000		2300	2200			
	20	1360	1600	1900	CO/SO	900/1000		2400	2350			
Impulse 108	15	1020	1000	2400	CO	800	2000 (S) 2100(O) 2200(O) 2300(O) 2400(O)	1900	2900	Up to 1.5	1600	5200
					SO	900						
	20	1360	1300	2400	CO	900		2200	2900			
					SO	1200				1.75	2100	
	26	1768	1600	2400	CO	1000		2500	2900			
					SO	1200						
Kangaroo Lite	3	204	900	900	CO	700	2000(S) 1900(O)	1600	1350	0.30(S) 0.50(O)	600	3900
					SO	800						
	4	272	1000	1000	CO	700		1600	1400			
					SO	800						
	5	340	1100	1000	CO	800		1700	1400			
					SO							

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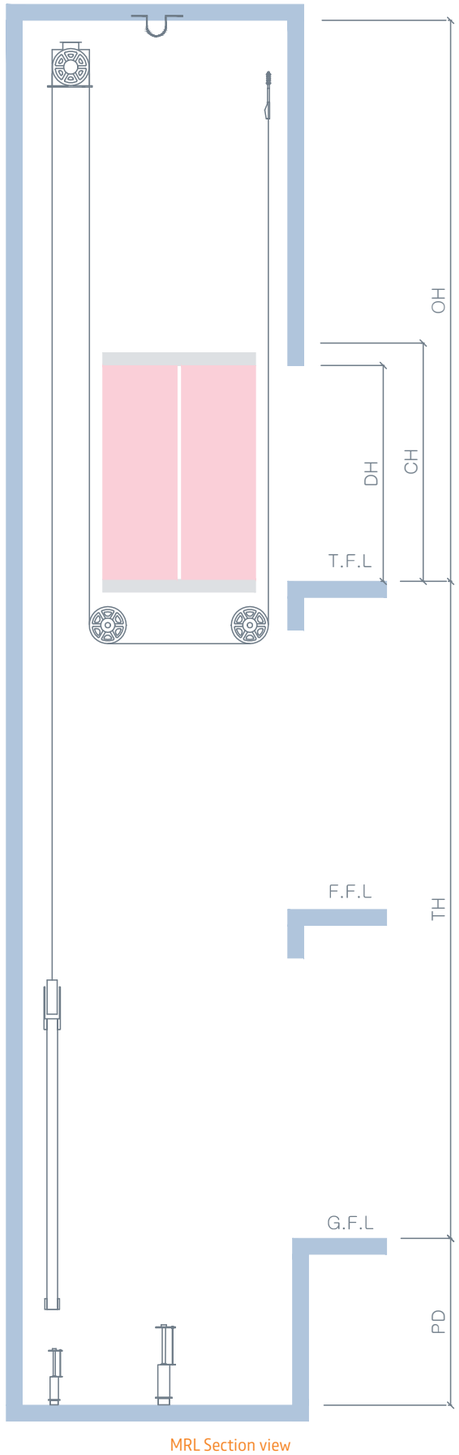
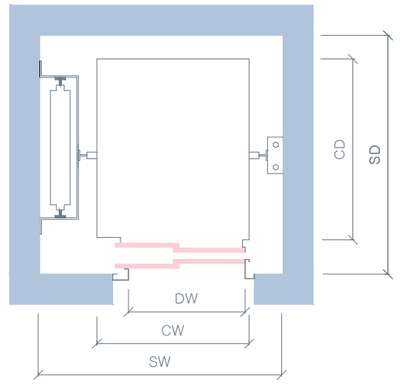
Standard (S)	Optional (O)	Centre Opening (CO)	Side Opening (SO)	Vertical Opening (VO)	Centre Opening 4 Panel (CO4P)	Reverse Opening (RO)	Car Height (CH)
Car Width (CW)	Car Depth (CD)	Door Opening (DO)	Door Width (DW)	Door Height (DH)	Shaft Width (SW)	Shaft Depth (SD)	Meter per secound (m/s)
Pit Depth (PD)	Overhead Height (OH)	Travel Height (TH)	Ground Floor Level (GFL)	First Floor Level (FFL)	Top Floor Level (TFL)		

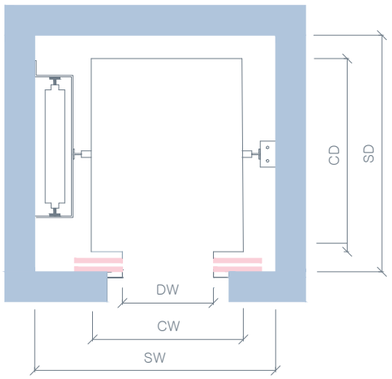
construction layout for MRL elevator



MRL Section view

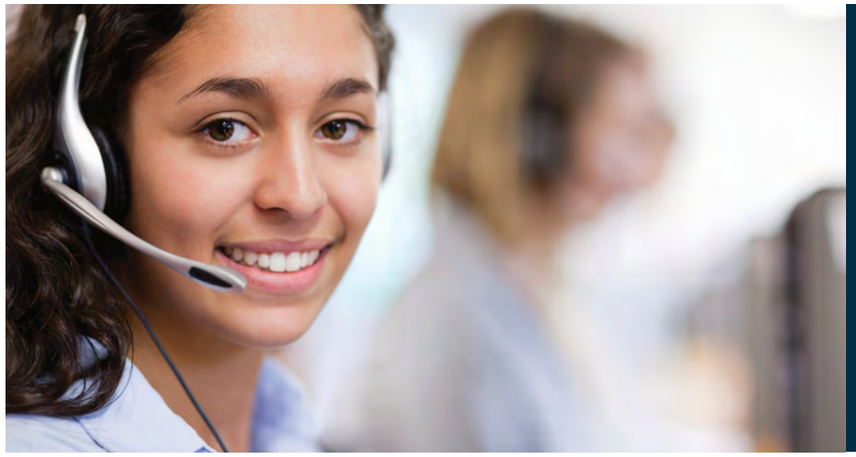


Side Opening Door



Center Opening Door

quality of services



Round the clock customer call service: Any time any where

Our motto is to bring a smile on our customer's face with the finest solutions. We speak with love and compassion with our customers even during after sales services.

We believe in maintaining relationships for great partnerships. Our service stands for knowledge, experience and technical support through a dedicated customer service team. Our customer service team receives call from our customers and shares the matter with our field engineers for immediate and safe service resolution.

Backed by expertise of complete elevator system solutions and proven track record of brilliant products and services, OECL has consistently offered highly-evolved customer support solutions and business value propositions that go above and beyond the scope of normal support solution providers.

Safety comes first

Our foremost priority is to provide safety for our employees and people who are in daily use with our products. We can proudly say that ORBIS has achieved Zero Accident Credential toward installed and running equipment globally.

Modernization

We aim to redefine every angle of your existing equipment.

We have a wide range of modernization solutions for your existing equipment – we redefine your old equipment through replacement of any malfunctioning parts, either from our equipment or of any other manufacturer. Our concept of modernization is designed to meet the customer's requirement of having an elevator that matches with the needs of new era.

ORBIS offers various types of modernization plans that are categorized as per customer's exact needs and capitalization.

important information

for elevator planning

Work by others

The work below is not included in the elevator installation work and should be furnished by the building contractor or buyer in accordance with our drawings, relevant to international or local codes and regulations.

General

- Project Site Details & Drawings (Plan, Sectional Drawing along with lift well size and m/c room details)
- A secured and lockable area for storage of elevator equipment and materials during installation
- Scaffoldings, planks and monkey ladders within or adjacent to the hoist way as per requirements
- Wiring and piping between monitoring / Intercom system
- Machine room and hoist way shall be free of dust, any projection or harmful gas.
- All electrical power for lighting, tools, welding etc during installation and testing of elevator
- Power Voltage fluctuation shall be in range of +5 to -10%
- Permanent three phase power supply with suitable earthing before testing and commissioning stage.

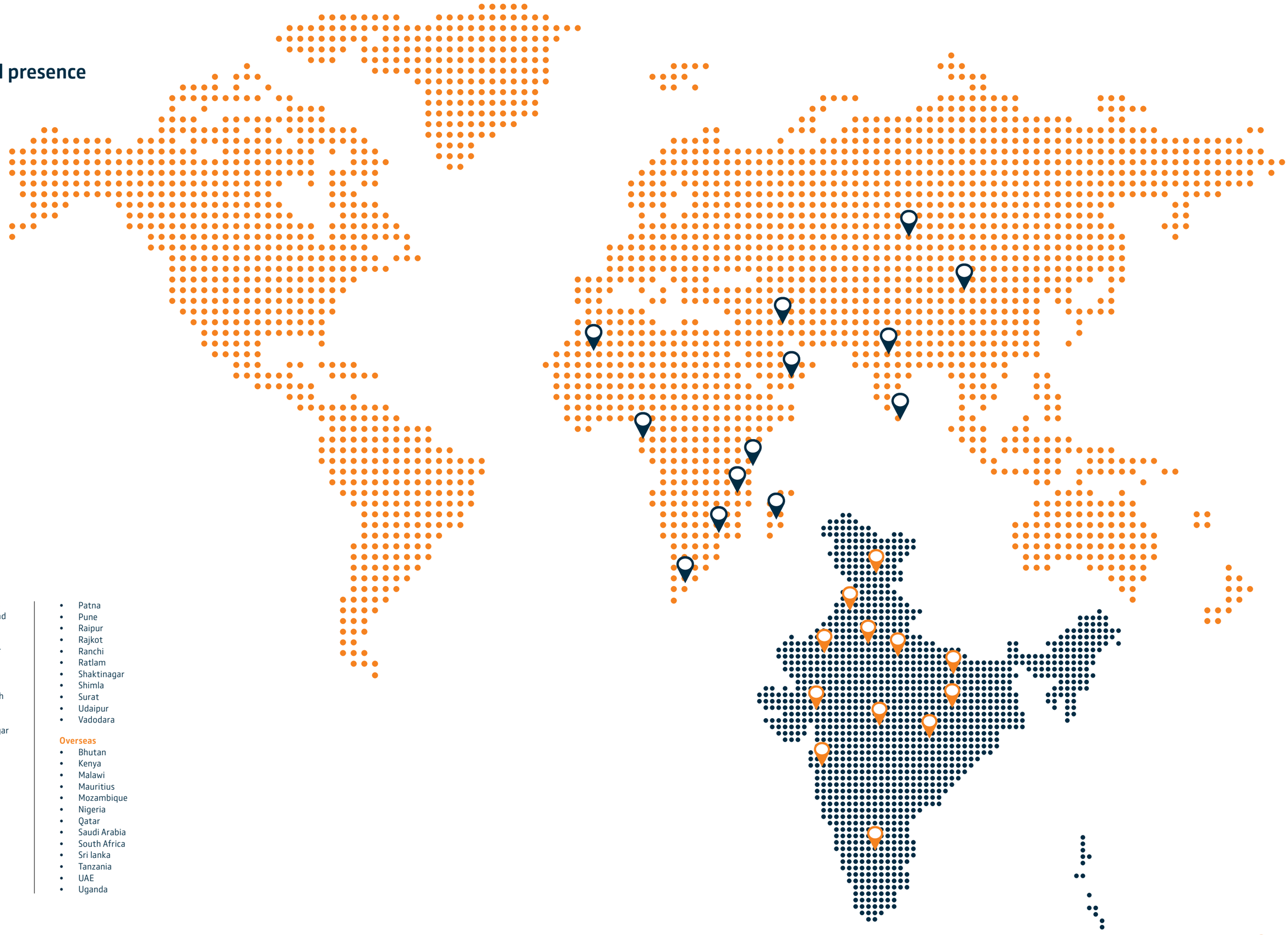
Hoist way

- A properly framed and enclosed hoist way, including venting as required by the governing codes or authority
- A waterproof light fixture with a plug point and light switch in pit and each floor at accessible point.
- All cutting, including cut outs to accommodate hall fixtures, patching, painting of walls, floors, or partitions, together with finished paint of entrance doors and frames, if required.
- A dry pit constructed to the elevator manufacturer's specifications to reinforce or sustain any vertical forces on the guide rails and impacted loads from the car and counterweight buffers.
- The tolerance of perpendicular line over the whole hoist way height must not exceed ±30mm.
- A concrete lantern or metal sill angle across the full width of the hoist way at each floor.

Machine room

- The machine room wall and overhead water tank wall should be separate to avoid any damage.
- Incoming Main three phase power supply and elevator hoist way single phase wiring Supply shall be install separately.
- A construction hoisting beam or hook within lift shaft or in machine room as per elevator contractor's guideline.
- Machine room door size should be 1000mm x 2000mm minimum.
- A suitable machine room with proper air ventilation, legal access with stairs and IPS floor.
- Provision of suitable lighting arrangement.
- There should be a provision of wiring between the controller and building management system.

global presence



Indian Centers

- Ahmedabad
- Amritsar
- Bengaluru
- Bhavnagar
- Bhilai
- Bhopal
- Bokaro
- Chandigarh
- Dehradun
- Delhi
- Gandhinagar
- Gurugram
- Gwalior
- Indor
- Jabalpur
- Jaipur
- Jamnagar
- Kanpur
- Kota
- Lucknow
- Ludhiana
- Mehsana
- Mumbai
- Noida
- Patna
- Pune
- Raipur
- Rajkot
- Ranchi
- Ratlam
- Shaktinagar
- Shimla
- Surat
- Udaipur
- Vadodara

Overseas

- Bhutan
- Kenya
- Malawi
- Mauritius
- Mozambique
- Nigeria
- Qatar
- Saudi Arabia
- South Africa
- Sri lanka
- Tanzania
- UAE
- Uganda

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Orbis Elevator co. ltd
302 , Apollo Arcade, R.C Technical College Road,
Off. S.G Highway, Ghatlodiya,
Ahmedabad- 380 061, Gujarat, India

Tele Fax +91 79 277 74141 / 81 | +91 80009 68014
Toll free no 1800 233 1017

info@orbiselevator.com | **www.orbiselevator.com**