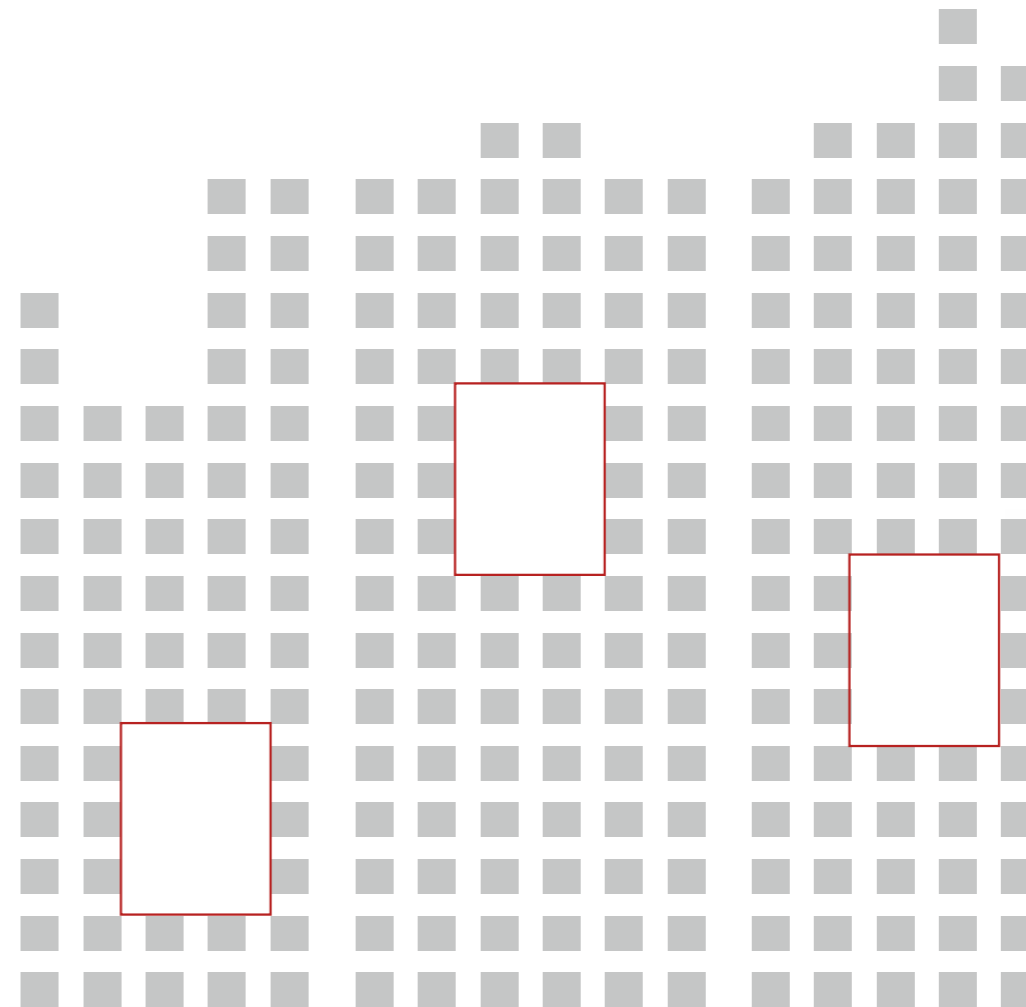




Art of Elevator Engineering



Head Office (Sales)

West Zone, Block A,
Opp. Pillar No. 663,
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Email : projects@marstechelevators.com
Tel. : +91 11 995 333 5163
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Service : +91 11 xxxxxxxx

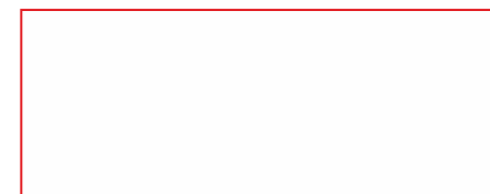
Redg. Office

C1/87, Sanjay Enclave,
Uttam Nagar,
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(INDIA)

Production Plant (J.V)

Kehwra Road,
Meerut Highway,
Bahallgarh, Sonapat
(Haryana)

Branch Office



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PRODUCTS

Passenger Elevator

Machine Room Less Elevator (SMART - M.R.L.)

Panoramic Elevator

Hospital Elevator

Automobile Elevator

Freight / Cargo Elevator

Steel Structure Elevator

Dumbwaiters

Escalators

Travelator/Moving Walkways

COMPANY PROFILE

MARSTECH ELEVATORS (ISO 9001-2008 accredited elevator company) is a modernized and professional elevator manufacturer which integrates the design, development, manufacturing, sales, installation and maintenance with exports facility of a wide range of quality products.

MARSTECH have a high reputation, with our head quarter located at New Delhi (INDIA) and robotic implant production at sonapat Haryana of 25,000 sq. ft area of annual production capacity over 2000+ units.

QUALITY & QUALITY CONTROL

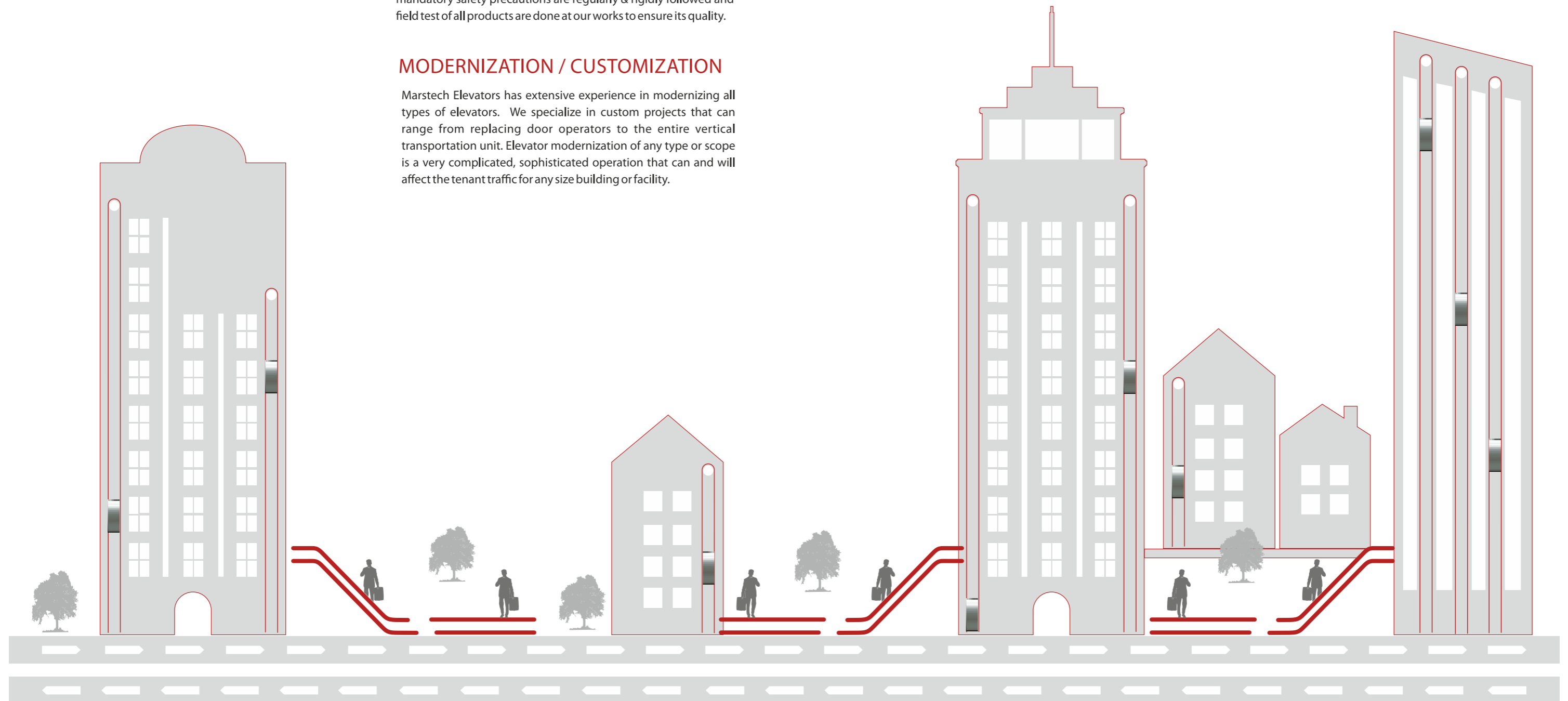
Our Staff is bound to produce a quality product for their own survival in their field therefore it is an inherent nature of individual Staff. We believe in quality work & ensure best quality control at site during the erection of products for this we have documented quality system and procedure. The IS codes or any other mandatory safety precautions are regularly & rigidly followed and field test of all products are done at our works to ensure its quality.

MODERNIZATION / CUSTOMIZATION

Marstech Elevators has extensive experience in modernizing all types of elevators. We specialize in custom projects that can range from replacing door operators to the entire vertical transportation unit. Elevator modernization of any type or scope is a very complicated, sophisticated operation that can and will affect the tenant traffic for any size building or facility.

WHY MARSTECH

- Over 40 years of experience.
- Expertise in designing and developing elevators as per the clients' requirements.
- Specially ranging from residence houses to high rise buildings.
- Elevators conform to the international quality standards.
- The latest technology and modern solution to offer.
- Recommended by leading architects around the country.
- State of the art luxury product line.
- Products and services that match european EN 81 safety standards.
- Customized solutions.
- Experience qualified engineers and support staff.



PASSENGER ELEVATORS

Marstech geared traction passenger elevators are ideal for applications that require a combination of rapid speed, high travel, and heavy lifting capacity—such as high rise residential buildings, office towers, hospitals, universities and colleges.

Modern traction elevators are incorporated with (VVVF) drive to improve ride quality and reduce energy consumption.



LOW RISE

Salient Features

Designed for Home, Villa's, Bungalow's and Farm House

Smooth, Quiet and Comfortable Ride

Energy Efficient V3F Drive

Proven Safety and Reliability

Counter Weight Safety

Automatic Rescue Device

Technical Specifications

Landings : 5

Travel : 20 mtrs

Load : 544 kgs

Passengers : 8

Speed : 0.68 - 1.00 mps

Optional Features

Available with MRL / Gearless Technology

Wide Range of LCD System

Bi-directional Entrance comfortable for Single User

Available with Single Phase Power Supply

MID RISE

Salient Features

Designed for Apartments and Shopping Malls

Smooth, Luxurious Jerk Free Ride

Energy Efficient V3F Drive

Proven Safety and Reliability

Aesthetics of Premium Quality

Counter Weight Safety

Technical Specifications

Landings : 10

Travel : 40 mtrs

Load : 884 kgs

Passengers : 13

Speed : 0.75 - 1.50 mps

Optional Features

Available with MRL / Gearless Technology

Customized Door Location

Car Height: 2300 mm

Door Height: 2100 mm

HIGH RISE

Salient Features

Designed for Business Towers and High-end Commercial Center

Flawless, Quiet, Comfortable, Luxurious Jerk-free Ride

Energy efficient V3F Drive

Counter Weight Safety

Proven Safety and Reliability

Aesthetics of Premium Quality

Technical Specifications

Landings : 30

Travel : 110 mtrs

Load : 2176 kgs

Passengers : 32

Speed : 1.00 - 2.50 mps

Optional Features

Available with MRL / Gearless Technology

Customized Door Location

Car Height: 2400 mm

Door Height: 2200 mm

DIMENSIONS - AUTOMATIC CENTER OPENING DOORS

Persons	Load (kgs)	Car Inside		Hoist Way		Entrance	Machine Room			PIT Depth	Over Head
		A	B	C	D		F	G	H		
4	272	1100	700	1600	1300	700	2000	3300	2500	1500	4300
6	408	1100	1000	1600	1600	700	2000	3300	2500	1500	4300
8	544	1300	1100	1700	1900	800	2800	3300	2500	1500	4300
10	680	1350	1300	1700	2100	800	2900	4000	2500	1600	4500
13	884	2000	1100	2500	1900	900	3900	4000	2500	1800	4600
16	1088	2000	1300	2500	2100	1000	3900	4100	2500	1800	4600
20	1360	2000	1550	2500	2400	1000	3900	4400	2500	2000	4800

DIMENSIONS - MANUAL OPENING DOORS

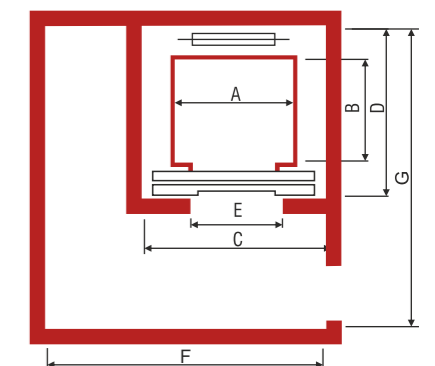
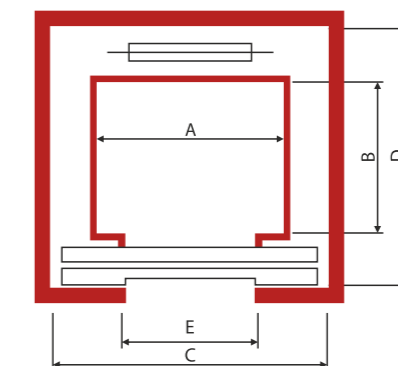
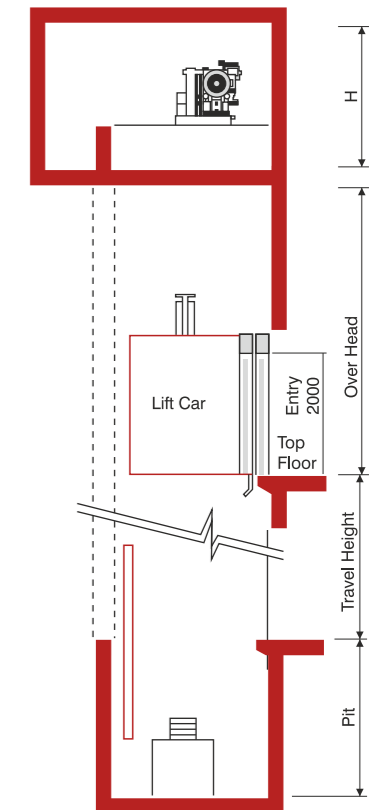
Persons	Load (kgs)	Car Inside		Hoist Way		Entrance	Machine Room			PIT Depth	Over Head
		A	B	C	D		F	G	H		
4	272	1100	700	1500	1100	700	1500	3100	2500	1350	4000
5	340	1100	900	1500	1350	800	1500	3200	2500	1350	4000
6	408	1100	1100	1600	1700	800	1800	3700	2500	1350	4000
8	544	1300	1100	1700	1500	800	1700	3700	2500	1400	4000
10	680	1400	1200	1800	1700	900	1800	3700	2500	1500	4200
13	884	1600	1300	2000	1900	1000	2000	3900	2500	1500	4400

NOTE:

Machine Room Layout can be different to suit architectural requirements.

All Dimensions are in millimeters.

Elevator shaft dimensions are minimum finished dimensions.



SMART - M.R.L. MACHINE ROOMLESS

M.R.L's save space by placing the compact, gearless machine inside elevator shaft.

No need for a machine room, which potentially lowers building construction costs.

Gearless machines configuration of MRL increases energy efficiency & provides smooth quiet ride.

M.R.L's typically travel faster than traditional hydraulic elevators, which saves time for passenger.



SPECIFICATIONS

Salient Features

Designed for Home, Villa's, Bungalow's and Farm House

Smooth, Quiet and Comfortable Ride

Energy Efficient V3F Drive

60% Power Saving

Infra-Red Door Curtain

Automatic Rescue Device

Technical Specifications

Landings : 35

Travel : 110 mtrs

Load : 272 - 2176 kgs

Passengers : 32

Speed : 0.75 - 2.50 mps

Optional Features

P.L.C. based technology and state-of-the-art V3F AC motor control.

Simplex or Group Elevator Operation

Bi-directional Entrance, Comfortable for Single User

Arrival Gong, 3-Way Intercom System

CREDENTIALS

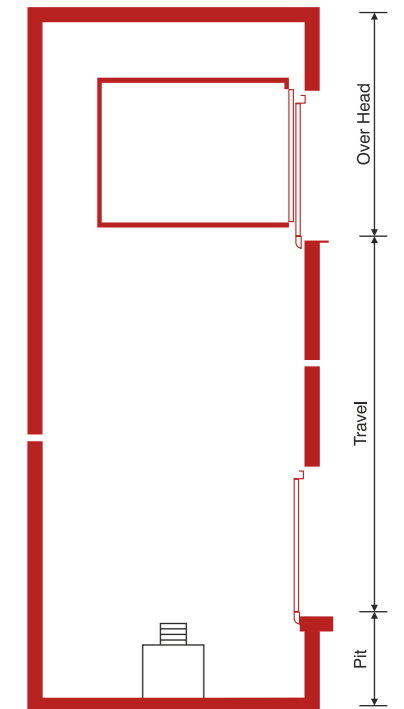
- High Efficiency
- Reduced Power Consumption
- ENCODER for Smooth Ride
- Quieter Operation
- Less Cogging
- Smooth Start Up
- Compact Design
- Low Maintenance
- Proven Safety & Reliability
- Fast & Easy Installation
- Emergency Light & Ventilation
- Traction from Bottom Pulley Arrangements
- Highly Durable & Tested Safety Brackets

DIMENSIONS - AUTOMATIC CENTER OPENING DOORS

Persons	Load (kgs)	Car Inside		Hoist Way		Entrance	PIT Depth	Over Head
		A	B	C	D	E		
4	272	900	850	1650	1550	700	1500	4300
6	408	1000	1100	1700	1650	700	1500	4300
6	408	1100	1000	1850	1600	800	1500	4300
8	544	1100	1300	1850	1750	800	1500	4500
10	680	1300	1350	1900	1800	800	1500	4600
13	844	1100	2000	1850	2450	900	1500	4600
16	1088	1300	2000	2200	2400	1000	1500	4600

DIMENSIONS - AUTOMATIC TELESCOPIC OPENING DOORS

Persons	Load (kgs)	Car Inside		Hoist Way		Entrance	PIT Depth	Over Head
		A	B	C	D	E		
4	272	900	850	1550	1650	700	1500	4300
6	408	1000	1100	1650	1750	700	1500	4300
6	408	1100	1000	1750	1700	800	1500	4300
8	544	1100	1300	1750	1800	800	1500	4500
10	680	1300	1350	1950	1900	800	1500	4600
13	844	1100	2000	1750	2500	900	1500	4600
16	1088	1300	2000	2000	2500	1000	1500	4600

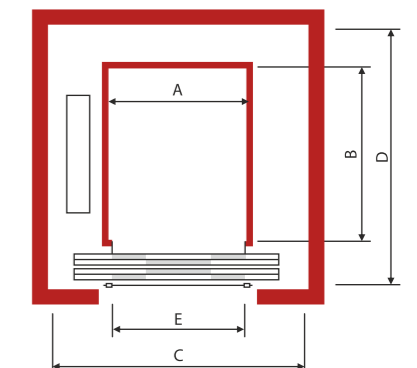
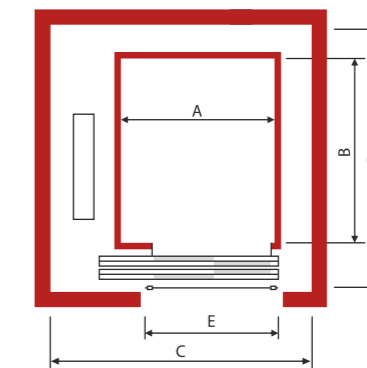


NOTE

Machine Room Layout can be different to suit architectural requirements.

All Dimensions are in millimeters.

Elevator shaft dimensions are minimum finished dimensions.



PANORAMIC ELEVATORS

The beauty of the glass elevators is enhanced when the lifts are the result of the combination of the creativity of our design team.

The location of the cars determines the final finishes of the panoramic elevators, sometimes they are built in angular shapes, sometimes in circular shapes, with or without canopies, car in polyhedron shapes, etc.

Eye-catching exterior and dazzling interior of the Panoramic Elevator adds glorious look to your commercial premises, theatres, shopping malls where delicacy & luxury cannot be compromised.



Salient Features

Designed for Shopping malls, Commercial Buildings, Airports etc.

Smooth, Quiet and Comfortable Ride

Energy Efficient V3F Drive

Toughened Glass

Counter Weight Safety

Proven Safety and Reliability

Technical Specifications

Landings : 25

Travel : 90 mtrs

Load : 544 - 1768 kgs

Passengers : 26

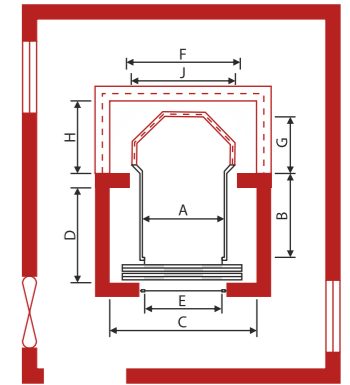
Speed : 0.75 - 2.00 mps

Credentials

- Exclusive & elegant design
- Different customized options for dooms and cabin exteriors.
- Includes all latest available passenger safeties.
- Optional Glass doors give capsule lifts a world-class look.
- Special Roping for extra safety

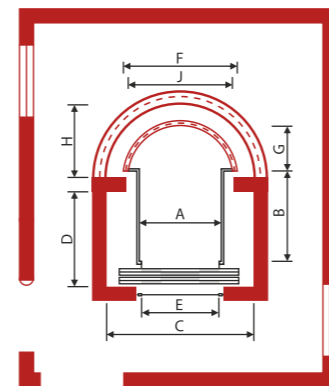
FIVE SIDED GLASS CAPSULE ELEVATOR

Persons	Load (kgs)	Car Inside				Lift Well				Entrance
		A	B	J	G	C	D	F	H	
8	544	900	1150	1325	700	2000	1225	1130	1100	800
10	680	1000	1150	1425	800	2200	1225	1230	1200	900
13	884	1100	1150	1550	925	2400	1225	1330	1325	1000
16	1068	1300	1250	1650	1016	2800	1325	1530	1425	1200



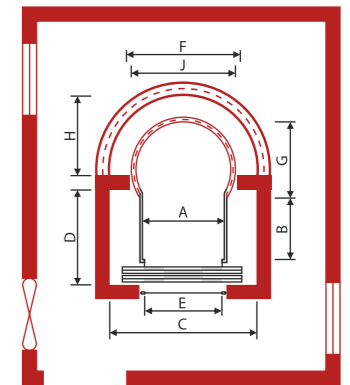
HALF ROUND GLASS CAPSULE ELEVATOR

Persons	Load (kgs)	Car Inside				Lift Well				Entrance
		A	B	J	G	F	H	D	C	
8	544	1000	1200	1250	600	1230	1000	1225	2000	800
10	680	1100	1300	1400	650	1330	1100	1325	2200	900
13	884	1200	1400	1550	700	1430	1100	1425	2400	1000
16	1068	1300	1500	1700	750	1530	1200	1525	2800	1200



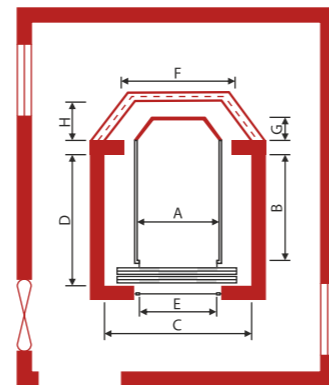
CIRCULAR GLASS CAPSULE ELEVATOR

Persons	Load (kgs)	Car Inside				Lift Well				Entrance
		A	B	J	G	C	D	F	H	
8	544	1000	1000	1150	850	2000	1300	1380	1000	800
10	680	1100	1100	1270	950	2200	1450	1500	1100	900
13	884	1200	1200	1390	1050	2400	1600	1620	1200	1000
16	1068	1300	1300	1510	1150	2800	1750	1740	1400	1200



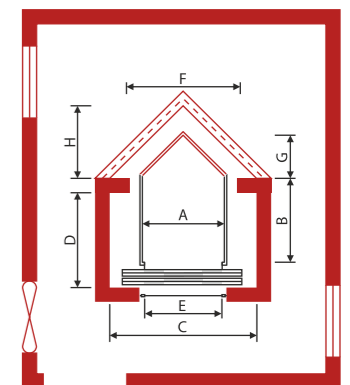
THREE SIDED GLASS CAPSULE ELEVATOR

Persons	Load (kgs)	Car Inside			Lift Well				Entrance
		A	B	G	C	D	F	H	
6	408	1000	1100	200	1800	1250	1230	470	700
8	544	1150	1200	200	2000	1380	1350	520	800
10	680	1250	1300	250	2200	1450	1480	580	900
13	884	1400	1400	300	2400	1550	1630	650	1000
16	1068	1550	1500	350	2800	1780	1650	790	1200



TRIANGULAR GLASS CAPSULE ELEVATOR

Persons	Load (kgs)	Car Inside			Lift Well				Entrance
		A	B	G	C	D	F	H	
6	408	900	1100	450	1800	1250	1130	850	700
8	544	1000	1300	500	2000	1450	1250	950	800
10	680	1150	1300	575	2200	1450	1380	950	900
13	884	1300	1500	650	2400	1650	1530	1150	1000
16	1068	1400	1600	700	2800	1750	1630	1350	1200



HOSPITAL ELEVATORS

Our company manufactures and supplies the premium quality of Hospital Elevators. We are one of the prominent stretcher elevators & hospital elevators manufacturers in the industry for our jerk less traveling, economically low power consumption and excellent designs.

We are superior in the quality and performance and are thus the major passenger hospital elevators suppliers in the industry.



STRINGENT FEATURES

- Full Collective Selective Selection
- Fireman Switch
- Emergency Alarm Switch
- VIP Mode Service
- Four way Intercom Service
- Safety features like infra-red Door Curtain
- Emergency Cab lighting, Emergency Phone
- Power Failure Emergency Rescue System
- Powerfull & Reliable Emergency Battery Backup
- Specially Designed Intercom System

Optional Features

- P.L.C. Based Technology and state-of-the-art V3F AC motor control.
- Simplex or Group Elevator Operation
- Bi-directional Entrance
- Comfortable for Single User

Technical Specifications

- Landings : 15
- Travel : 55 mtrs
- Load : 544 - 1360 kgs
- Passengers : 20
- Speed : 0.75 - 1.75 mps

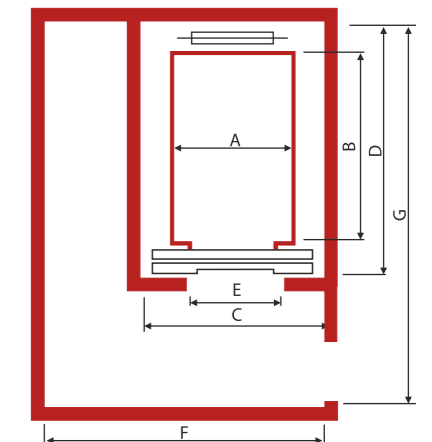
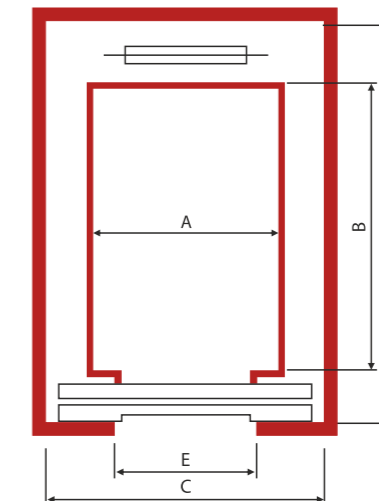
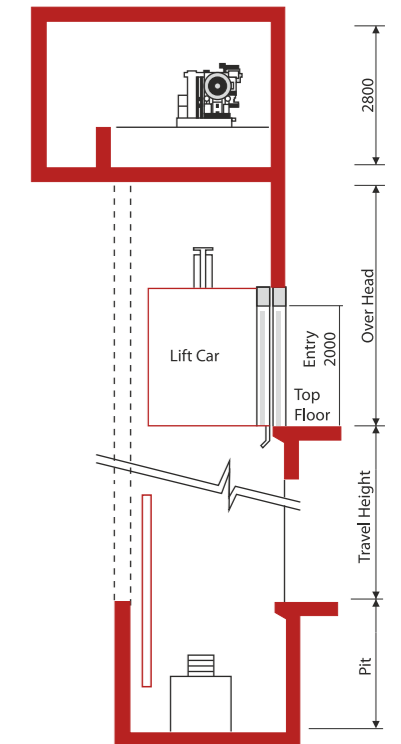
CREDENTIALS

Salient Features

- Designed for Hospitals, Medical Centres, Clinics
- Smooth, Quiet and Comfortable Ride
- Energy Efficient V3F Drive
- Proven Safety and Reliability
- Fast and Easy Installation
- Automatic Rescue Device

DIMENSIONS - AUTOMATIC CENTER OPENING DOORS

Load Persons	Speed (M.P.S.)			Car Inside		Lift Well		Entrance	Machine Room		PIT Depth	Over Head
	Kg.	Over	Up to	A	B	C	D	E	G	F		
15	1020	-	1.50	1000	2400	1800	3000	800	3700	5500	1600	4400
15	1020	-	1.75	1000	2400	1800	3000	800	3700	5500	1700	4000
20	1360	-	1.50	1300	2400	2200	3000	1200	4200	5500	1600	4400
20	1360	1.50	1.75	1300	2400	2200	3000	1200	4200	5500	1700	4400
26	1768	-	1.50	1600	2400	2350	3000	1200	4200	5500	1600	4400



NOTE

Machine Room Layout can be different to suit architectural requirements.

All Dimensions are in millimeters.

Elevator shaft dimensions are minimum finished dimensions.



AUTOMOBILE ELEVATORS

Sometimes a ramp is not an option, This where a automobile can offer the perfect solution.

These elevators offers finishes and ride rarely found in these type of elevators.

Unlike parking hoists, You can park your car over multiple levels in quiet comfort.

The Digital controls ensure reliability and a range of options to suit your specific needs. Sizes available include automobile elevators for the compact vehicle through to the largest prestige automobiles.



SPECIFICATIONS

Salient Features

Ideal for any number of floors

Two-side open door is possible at ground floor at the same or different level

Different plan for manual collapsible doors / Telescopic doors

Sizes are finished with dimensions in mm

Hoist way walls are 230 mm thick Brick or 150 mm. RCC walls

Technical Specifications

Landings : 20

Travel : 65 mtrs

Load : 500 - 1000 kgs

Speed : 0.75 - 1.00 mps

Optional Features

P.L.C. based technology and state-of-the-art V3F AC motor control.

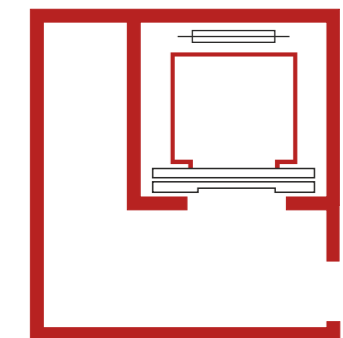
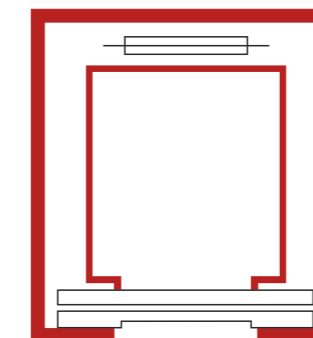
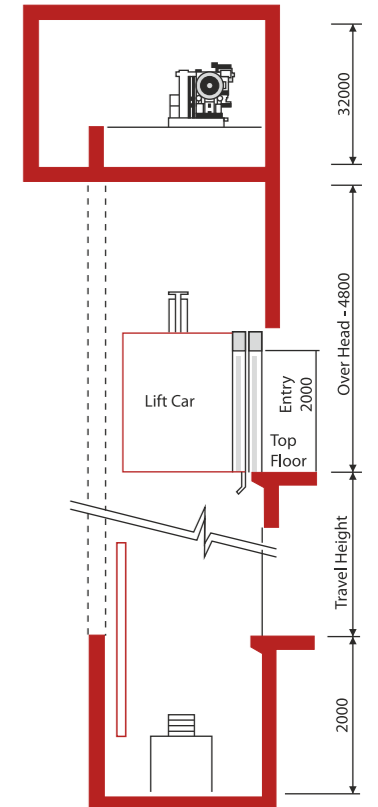
Simplex or Group Elevator Operation

Bi-directional Entrance Comfortable for Single User

Safety features like infra-red door curtain, emergency cab lighting, emergency phone

DIMENSIONS - AUTOMATIC CENTER OPENING DOORS

Type & No. of Vehicle	Load (Kgs.)	Car Inside Width x Depth	Lift Shaft One Side Open Width x Depth	Lift Shaft Two Side Open Width x Depth	Entrance Width x Height
3 Two Wheelers	500	1200 x 2400	2000 x 2800	2000 x 2400	1000 x 2000
4 Two Wheelers	750	1500 x 2400	2300 x 2800	2300 x 2480	1300 x 2000
Small Cars	1200	2300 x 5000	3050 x 5250	2900 x 5080	2100 x 2000
Mid Sized Cars	2000	2400 x 5100	3150 x 5350	3250 x 5200	2200 x 2000
Luxury Cars	3000	2700 x 5400	3450 x 5800	3500 x 5500	2400 x 2200
S.U.V.	4000	3000 x 5750	3800 x 6050	3800 x 5850	2400 x 2200
L.C.U. / Bus	10000	3500 x 5300	4400 x 7700	4400 x 7700	3000 x 3000



NOTE

Machine Room Layout can be different to suit architectural requirements.

All Dimensions are in millimeters.

Elevator shaft dimensions are minimum finished dimensions.

FREIGHT / CARGO ELEVATORS

Freight / Cargo elevators are elevators that, by definition, have to be used in industrial settings

MARSTECH does not recommend a normal lift for this purpose, but has a specific product offering all the qualities of strength and reliability demanded of such elevators.

MARSTECH focuses much attention on the doors that on goods lifts are expected to offer the maximum span possible to allow for easy loading and unloading of goods.



SPECIFICATIONS

Salient Features

Designed for Ware house, Factories, Industries plants, Appatments Smooth, Quiet and Comfortable Ride

Energy Efficient V3F Drive

Counter Weight Safety

Automatic Rescue Device

Highly Durable Structure

Robust Design

Technical Specifications

Landings : 22

Travel : 17 mtrs

Load : 500 - 3000 kgs

Speed : 0.75 - 1.00 mps

CREDENTIALS

- Power Failure Emergency Rescue System
- Full Collective Selective Selection
- Fireman Switch
- Emergency Alarm Switch
- VIP Mode Service
- Two way Intercom service

Optional Features

P.L.C. based technology and state-of-the-art V3F AC motor control.

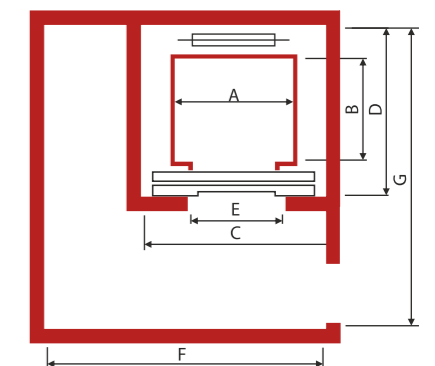
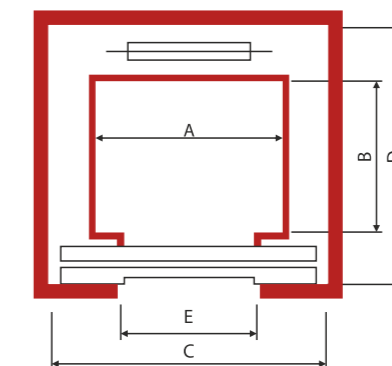
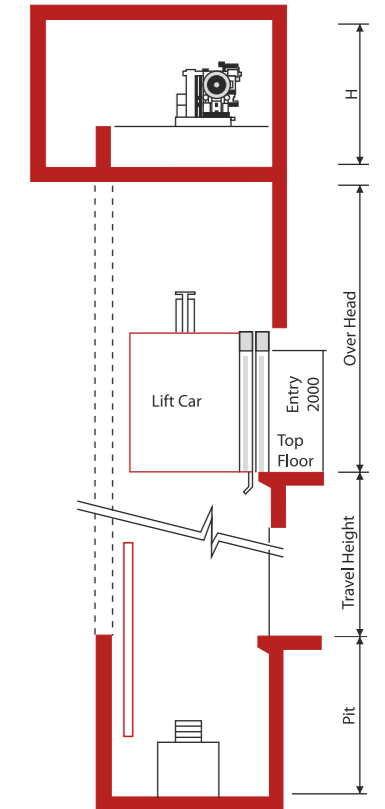
Simplex or Group Elevator Operation

Bi-directional Entrance
Comfortable for Single User

Safety features like infra-red door curtain, emergency cab lighting, emergency phone

CIVIL DIMENSION FOR FRIGHT / CARGO ELEVATORS

Load Kg.	Speed (M.P.S.)	Car Inside		Lift Well		Entrance Two Speed E	Machine Room			PIT Depth	Over Head
		A	B	C	D		G	F	H		
500	1.00	1100	1200	1900	1600	1000	2500	4100	2600	1600	2600
1000	0.50	1400	1800	2300	2200	1300	2500	4700	2600	1600	2600
1500	0.55	1700	2000	2600	2400	1600	2600	4900	2600	1600	2600
2000	0.55	1700	2500	2600	2900	1600	2600	5400	2600	1600	2600
2500	0.40	2000	2500	2900	2900	1800	2900	5400	2600	1600	2600
3000	0.40	2000	3000	3400	3400	1800	2900	5900	2600	1600	2600



NOTE

Machine Room Layout can be different to suit architectural requirements.

All Dimensions are in millimeters.

Elevator shaft dimensions are minimum finished dimensions.



STEEL STRUCTURE ELEVATORS

Sometimes a ramp is not an option. This is where our Automobiles Elevators can offer the perfect solution. Smooth, quiet and powerful. These Elevators offers finishes and ride quality rarely found in equipments of this type. Optional remote control allows you to travel to your parking level without leaving the vehicles. Sophisticated digital controls endure reliability and a range of options to suit your specific needs. Sizes available include lifts for the compact vehicle through to the largest prestige auto.



DUMBWAITERS

Marstech Elevators takes pleasure to announce world class dumbwaiter in world of economy.

Easy installation & latest mechanism in dumbwaiter ensures long life & trouble free operation. Our dumbwaiter are specially designed for hotels, restaurants pubs, Residential etc.



SPECIFICATIONS

Salient Features

Designed for Industrial Projects, Private Pent House, Construction Sites

Proven Safety & Reliability

Energy Efficient V3F Drive

Fast & Easy Installation

Requires no Machine Room

Counter Weight Safety

Technical Specifications

Landings : 48

Travel : 200 mtrs

Load : 544 - 2500 kgs

Passengers : 30

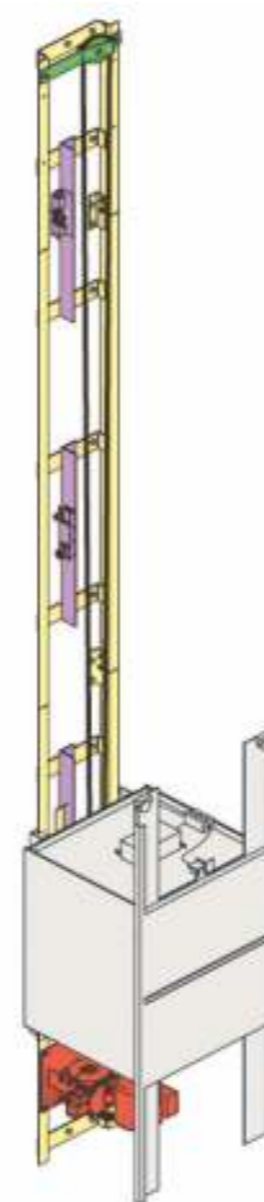
Speed : 0.75 - 1.00 mps

CREDENTIALS

- Power failure emergency rescue system
- Full Collective Selective Selection
- Fireman Switch
- Emergency Alarm Switch
- VIP Mode Service
- Two way Intercom service
- Heavy Duty Steel Structure
- Free Standing till 15 meters
- Highly Robust Structure

Optional Features

- Simplex or Group Elevator Operation
- Bi-directional Entrance
- Comfortable for Single User
- Emergency Cabin Lighting
- Emergency Phone



MINIMUM CIVIL DIMENSIONS FOR DUMBWAITER

Load KG	Speed MPS.	Car Inside		Lift Well		Entrance	
		A	B	C	D	E	H
100	0.50	700	700	1200	900	700	800
150	0.50	800	800	1300	1000	800	900
200	0.25	900	900	1400	1100	900	1000
250	0.25	1000	1000	1500	1200	1000	1200

SALIENT FEATURES

Digital Up and down indication at all floor levels

Minimum space and overhead requirements

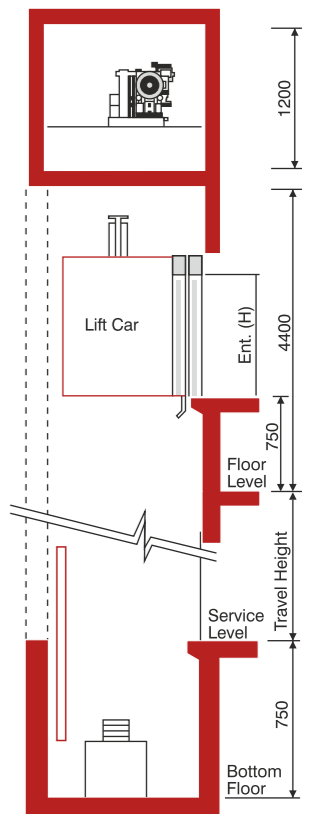
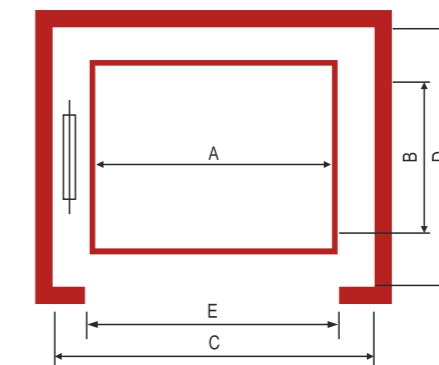
Door open buzzer

Easy & hazzle free maintenance

Requires no machine room

Bi - Directional openings are easily possible

Counter weight safety



ESCALATORS

Marstech escalator completes the ergonomically in design and thoroughly holds an in-depth consideration of the customer's requirements in various aspects such as the escalators' security, aesthetics and performance etc. It brings about the more distinguished quality and the more outstanding properties. The new guiding system, advanced equal radius handrail newel, high rigidity balustrade, modeling skirt, fashion and efficient landing plate design etc result in the secure running performance, more comfort and stable in riding and more powerful carrying capacity.



TRAVELATORS

Marstech moving Travelators form integrated horizontal and vertical transport systems that will enhance both the appearance and operation of any building or infrastructure development.

A wide range of finishes and materials are available, as well as a selection of arrangements that perfectly match and complement their surroundings.



MARSTECH ESCALATORS - CREDENTIALS

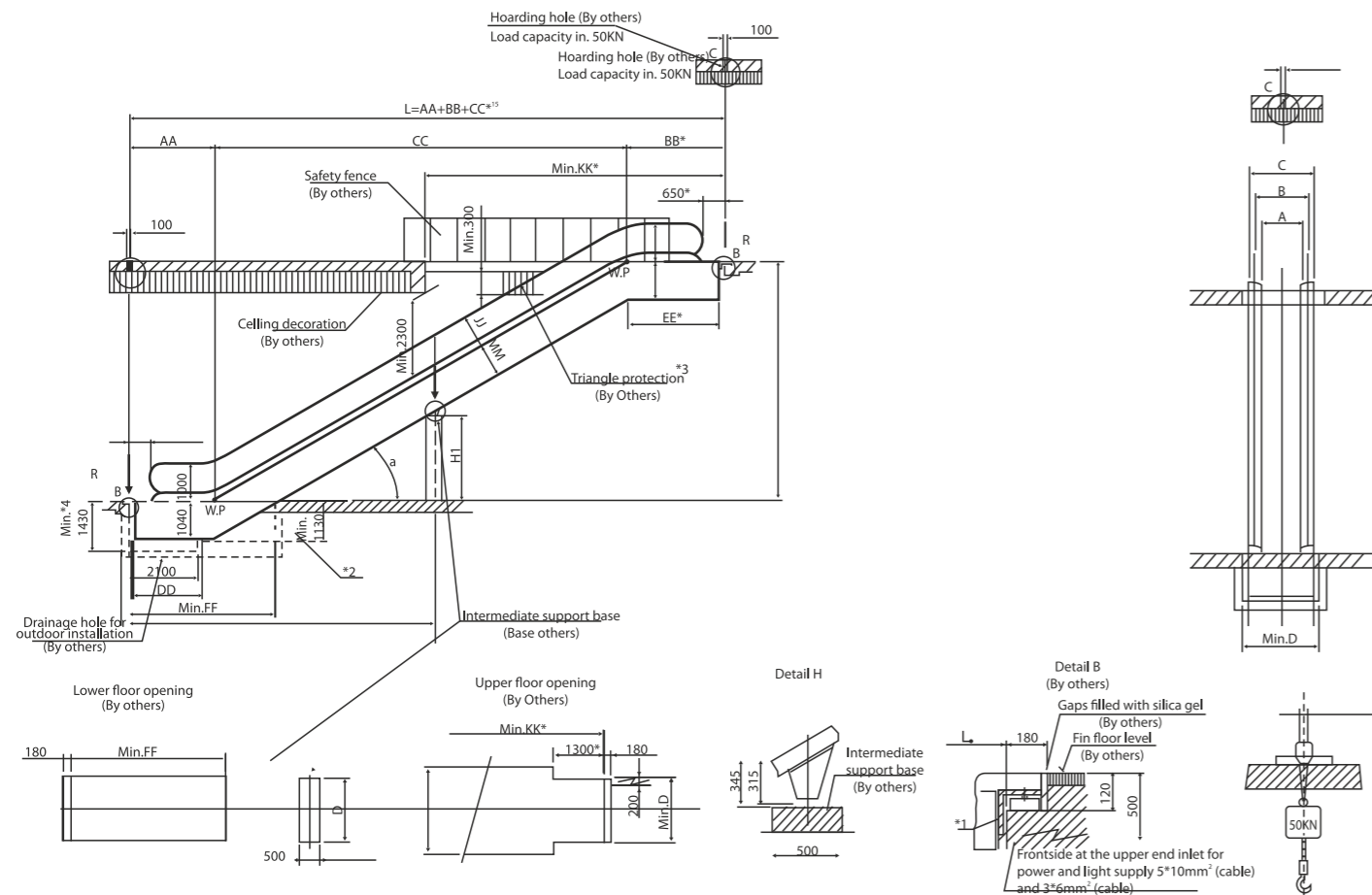
Salient Features

The green warning light is installed at entrance position to guide passenger to identify the landing and moving step to ensure safety.

Advanced big radius design in exterior skirt decking added with comforting horizontal length, excellent fluency.

Creative new design of flexible handrail inlet, slide type floating with smooth running when touching, decreases the possibility of accident.

Wondering positioning of middle comb plate, separate hard connection of movable combplate.



MARSTECH TRAVELATORS - CREDENTIALS

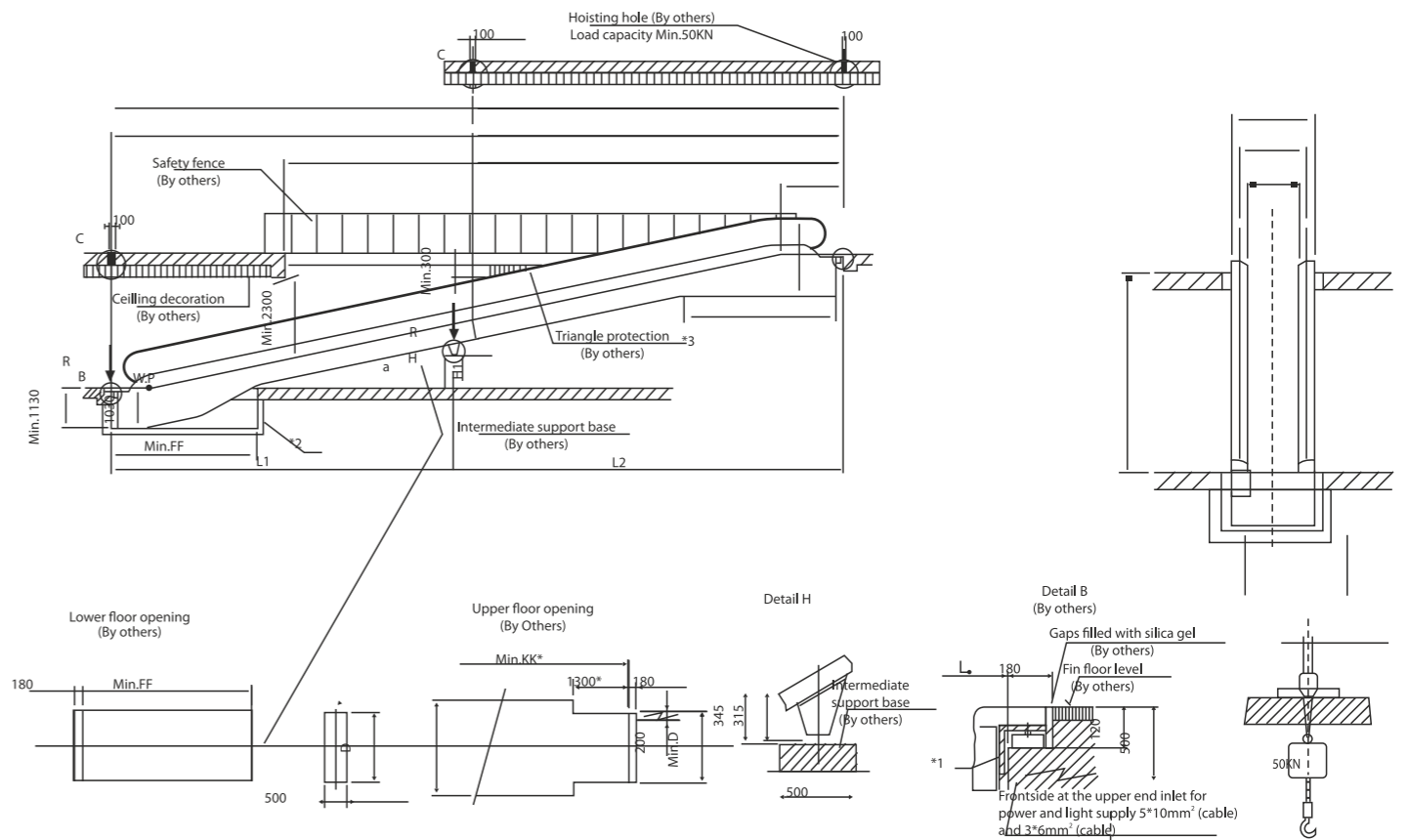
Salient Features

Ensuring every passenger rides safely is a big responsibility. Marstech are doing utmost to install the safest moving walkways with full compliance as per safety standards.

Auxiliary brake (where appropriate to code/standard)
 Brake release sensing device
 Broken drive chain safety device (where appropriate to code / standard)

Broken step chain safety device
 Comb obstruction device
 Electric circuit protection device
 Electro-mechanical brake

Emergency stop button
 Handrail newel entry guard
 Overspeed protection device
 Phase failure & reversal protection



design your own elevator cabin



DOOR OPTIONS



Normal Door



Small Vision Glass Door



Big Vision Glass Door

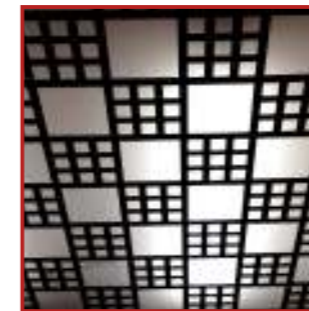


Manual Swing Door

CEILING



TP - ME - A1



TPSQ - ME - B1

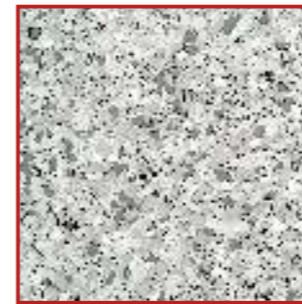


LSR - MEJD - B2



LSR - MEBM - B3

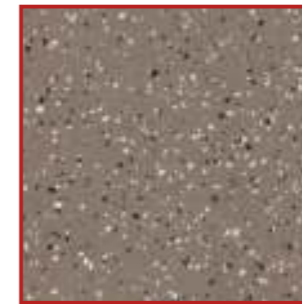
FLOORINGS



MEB - PF1



MESPK - 1

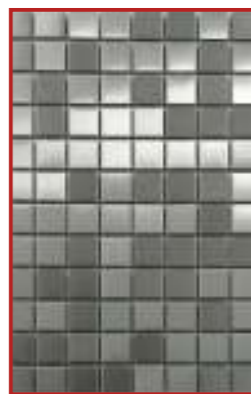


ME-PL06



MEB-Optional

WALL PANELS - STAINLESS STEEL



WALL PANELS - MILD STEEL



SIMENS Grey



Grey

DISPLAY & SIGNAGES



3 PERS. 340 KG. OVER LOAD



SAFETY GUIDELINES - MACHINE ROOM



The job for installing the elevator is the specialised one, It is performed by trained and skilled Marstech engineers facing any odds at construction sites.

The customer plays an important role in enhancing our technician's efficiency. By strictly adhering to the following set of guidelines, the customer will not only provide the safe working environment for our technicians but will also protect the elevator from possible damage at site.

SAFE ACCESSWAY

The passage to be adequately lit para should be clear of any tripping hazards. The machine room for two doors always open outwards and only towards of the platform is less than the full swing door + 600mm.

Safe entry to machine room is a pre-requisite to enable technicians, engineers inspectors (lift, building) and later, mechanics to move in and out freely. In an emergency it helps to quickly set things right.

EARTH LEAKAGE CIRCUIT BREAKERS

Provide ELCB on main 230v - 1hp input to machine room. This will supply the hoist way light, pit lights and car light

The ELCB helps to minimise the danger of shock to elevator users and to mechanics

LIGHTING / VENTILATION

Adequate lighting to carry out mechanical electrical work safely and efficiently. Adequate ventilation to keep machine room temperature below 40 degree C.

Fault finding and repair work can be performed quickly to minimise inconvenience to the customer. Cool machines run more efficiently with lower failure rate.

TRAPDOOR

The trap door must be fabricated to comfortably support the weight of persons walking over it while carrying out their normal course of work.

The trap door cover should not suddenly give way when two or three persons stand on it. A poorly designed trap door may suddenly collapse endangering the lives of technicians working in the machine room

HOISTING BEAMS / HOOKS

Must have safe working load clearly indicated

SAFETY GUIDELINES - HOISTWAY



Scaffolding

A firm, stable, and sturdy scaffolding erected in the hoist way

Technicians become more confident when they step onto a strong scaffolding. The fear of falling is greatly reduced and they can concentrate better on giving you a quick job faster.

BARRIERS

Barriers should be provided across all open entrances in the form of 3 strips at 42", 18" and a toe board in 4" in height

An adequate barrier will save any curious person or technicians from accidentally walking into and falling down an unguarded hoistway - Avoid chance of fatal accident

SEPARATOR SCREEN

In case there is more than one elevator in a common elevator hoistway, a separator screen should be provided between the two elevator hoistways. This could be either of masonry construction or a warmish stretched between the separator beams.

NOTE : In case of a fire proof elevator the separator must be a masonry wall.

This minimises the risk of any elevator component accidentally protruding into the adjacent hoist way where the other elevator is running

LIGHTING

Properly earthed lighting arrangement to be provided in the hoist way in the form of 230V - 100W bulkhead fittings at each floor level with its switch in the machine room.. The pit light accessible from ground floor entrance. The line in the midway junction box which holds the car light should also be controlled by a switch provided in the machine room.

Visibility in the hoistway is very poor especially when landing doors are of the panel type. Emergency repairs take much longer where lighting is inadequate

A steel ladder should be provided in the pit for convenient access. The ladder must extend to at least 1' above the lowest landing as indicated in the illustration. Pit- Light switch & Pit stop must be accessible from the entrance.

A strong ladder is required to provide safe access to the pit to work in the elevator and to carry out routine maintenance of elevator components located in the pit.

WATER PROOFING

The elevator pit well must be thoroughly water proofed.

If water enters the pit well it could render the travelling cables unsafe and also cause the other equipment to rust. Water in the electrical cables can cause serious malfunctioning of the elevator and result in heavy repair bills.

SURROUNDINGS

In the construction stage, access to the elevator and its adjacent working areas must be safe at all the times. There should be no tripping hazards, loose hanging electrical wires or dangers from any falling objects.

Accidents to technicians could prove to a fatal and legal complications. Serious injurious to the technicians at the erection stage could disrupt installation and job completion schedule of the elevator. Such delays are better avoided for obvious reasons.

AMENITIES

Basic amenities like safe drinking water and reasonable toilet facilities for technicians working at site must be provided. Adequate measures to control the monace of mosquitoes must also be taken.

In the absence of safe drinking water, technicians are prone to fall ill. Contaminated water could lead to dangerous diseases.

INDIAN STANDARDS

Recommended Elevator Speed as per Indian Standard : 14005 (Part 2 / Section1) : 2000

No. of Floors	Speed
4 to 5	0.5 to 0.75 mps
6 to 12	0.75 to 1.5 mps
12 to 20	Above 1.5 mps

INDIAN STANDARDS

The following INDIAN STANDARDS provide essential information for planning installations:

Sr. No.	Code No.	Year	Title
a)	IS-14665	2000	Electric Traction Lifts
	Part 1	2000	Guidelines for under dimensions of passenger, goods, service and hospital lifts
b)	Part 2	2000	Code of practice for installation, operation and maintenance Section 1 - Passenger and goods lifts Section 2 - Service lifts
c)	Part 3	2000	Safety Rules Section 1 - Passenger and goods lifts Section 2 - Service Lifts
d)	Part 4	2001	Components Section 1 - Lift Buffers Section 2 - Lift guide rails and guide shoes Section 3 - Lift car frame, car, counterweight and suspension Section 4 - Lift safety gears and Governors Section 5 - Lift retiring cam Section 6 - Lift doors and locking devices and contacts Section 7 - Lift machine and brakes Section 8 - Lift wire ropes Section 9 - Controller operating devices for lifts
e)	Part 5	1999	Inspection Manuals
2	IS-14671	1999	Inspection Manuals
3	IS-2147	1962	Degrees of protection provided by enclosures for low switch gear and control gear.
4	IS-2332	1972	Nomenclature of floors and storeys
5	IS-4591	1968	Code of practice for Installation and maintenance of escalators

Standards may be obtained from:

Bureau of Indian Standards
Manak Bhavan
9, Bahadur Shah Zafar Marg,
New Delhi - 110002

CLIENTLE.



