

**TOWARDS**

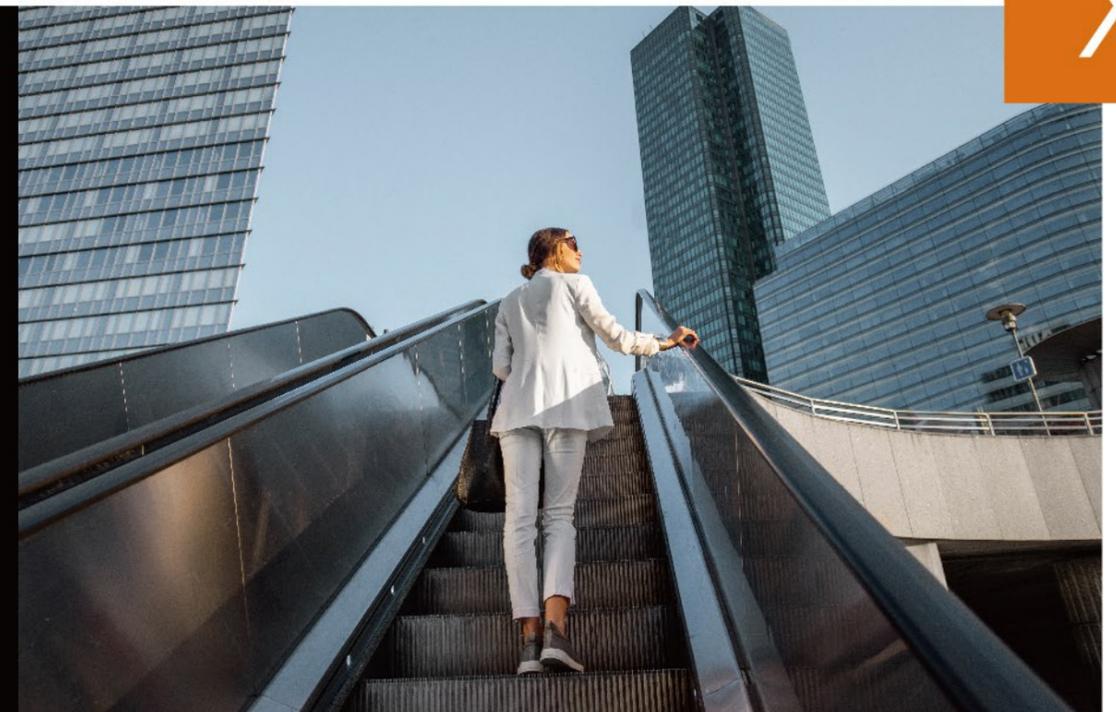
# TOWARDS ESCALATOR MOVING WALKWAY

TOWARDS BETTER LIFE



## SUZHOU TOWARDS ELEVATOR CO.,LTD

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# TOWARDS ELEVATOR

## TOWARDS BETTER LIFE



A good product stems from the shared desire for beauty between its creator and user.

Towards Elevator Escalator, with the mission of "Towards better life", is committed to providing global users with a high-quality Elevator & escalator experience that integrates safety, intelligence and comfort. Inheriting the genes of European precision engineering technology, introducing cutting-edge foreign technologies, and equipped with a professional R&D team with China new tech. The brand has been deeply engaged in the Elevator & escalator for over two decades. With a leading intelligent manufacturing system, flexible non-standard customized design, and a "full life cycle" service concept, it redefines the vertical travel experience as an industry benchmark.

### > FRONTIER TECHNOLOGY

Our professional R&D team, based on local demands, is dedicated to innovative research and development.

### > CUSTOMIZED DESIGN

Tailor-made to meet the personalized needs of different spaces.

### > LEAN MANUFACTURING

Twenty years of experience accumulation has enabled "Made in China" to go global.

### > FULL LIFE CYCLE SERVICE

24-hour service is our commitment to users.

# MAKE TRAVELING A KIND OF ENJOYMENT

In the fast-paced modern cities, escalators and moving walkways carry the daily passage demands of tens of thousands of people and serve as the invisible engines of transportation hubs and commercial centers. TOWARDS escalators and moving walkways, with their safe and reliable performance, intelligent and innovative design, create a comfortable and smooth travel experience.



## SAFE AND COMFORTABLE, STABLE OPERATION

Multiple intelligent safety protection devices monitor the operation status throughout the process to ensure users' safety and peace of mind.



## HUMANIZED DESIGN, BEAUTIFUL AND DURABLE

The appearance is exquisite and beautiful, with simple and smooth lines, perfectly integrating into various high-end shopping malls and public facilities.



## ENERGY-SAVING AND EFFICIENT, GREEN AND LOW-CARBON

Adopting internationally leading energy-saving technologies, energy consumption is reduced and the pressure of peak passenger flow is alleviated.



## SMOOTH CARRYING CAPACITY AND POWERFUL TRANSPORTATION CAPACITY

Suitable for scenarios with frequent and dense transportation demands of people and goods, it comprehensively helps to quickly guide the flow of people during peak hours.

# Escalator

## EVERY STEP IS TRUST

TOWARDS escalator  
With technology, safety and comfort  
Create a smoother mobile experience for the space.

### ENERGY SAVING AND HIGH EFFICIENCY

#### ADVANCED VARIABLE FREQUENCY DRIVE CONTROL

Reduce energy consumption, cut operating costs and achieve green upgrading.

#### HIGH-PRECISION TRACTION MACHINE

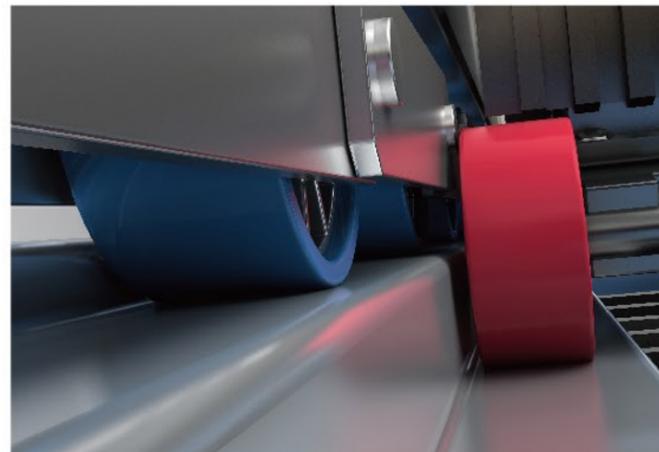
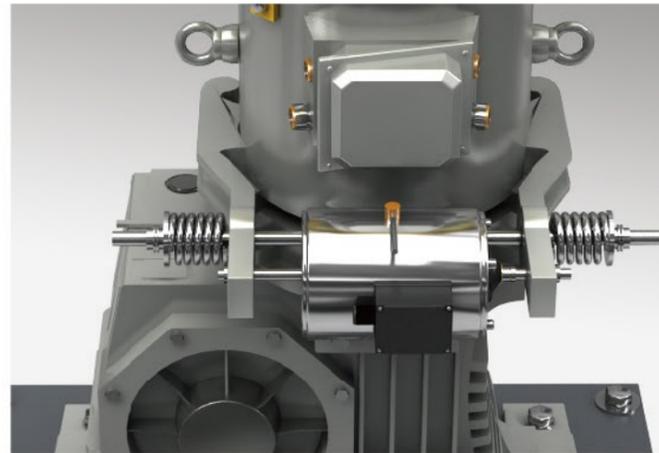
It features strong and stable power, low noise and a long service life, making it suitable for high-volume passenger transport demands.

#### PRECISE STEPPED GUIDE RAIL DESIGN

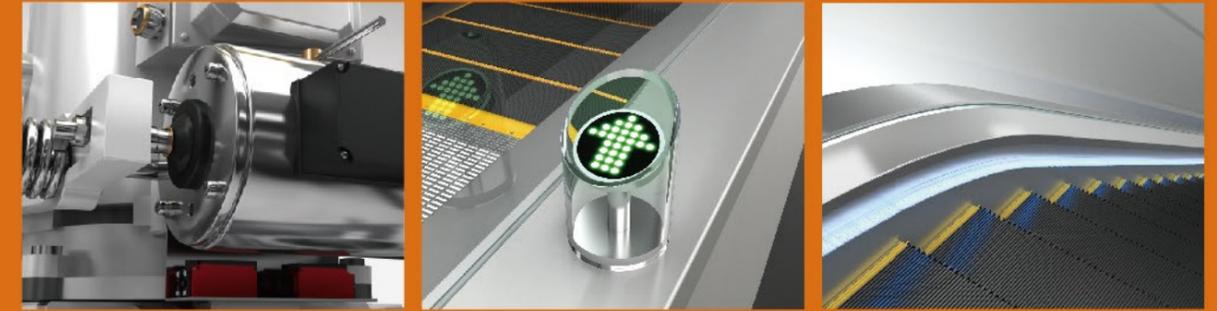
Ensure the stability of step direction control to enhance safety and operational efficiency.

#### SUPER LOAD-BEARING CAPACITY AND CORROSION RESISTANCE

Sturdy material, flexible to meet the requirements of multi-scenario and high-intensity use, durable.



### SAFE BEARING



#### UNIQUE BRAKING DEVICE

The braking torque can be freely adjusted, and the up and down running process is smooth and safe.

#### RUNNING DIRECTION DISPLAY

The high count array indication makes the running direction clearly visible, ensuring passenger safety.

#### INTELLIGENT FAULT DISPLAY

Rapid fault diagnosis enhances maintenance efficiency and saves maintenance costs and time.

#### HUMANIZED SKIRT PANEL LIGHTING

Elegant lighting design enhances visual recognition and ensures safety and convenience.



# MOVING WALKWAY

## CONNECT INFINITE POSSIBILITIES

**TOWARDS moving walkway**  
Lead smooth travel with technology and safeguard travel with safety.  
Create a smoother spatial environment, starting from TOWARDS.



### SMOOTH CARRYING

**MICROCOMPUTER CONTROL PANEL:**  
Fast operation speed, powerful internal functions, and high stability.

**HIGH-PRECISION DISPLACEMENT DETECTION TECHNOLOGY:**  
It can achieve a nearly zero to zero experience, allowing passengers to feel as relaxed and convenient as walking on flat ground.

**ADVANCED HANDRAIL DRIVE:**  
The friction wheel and V-belt are perfectly combined to enhance the driving force and keep the handrail surface as durable as new.

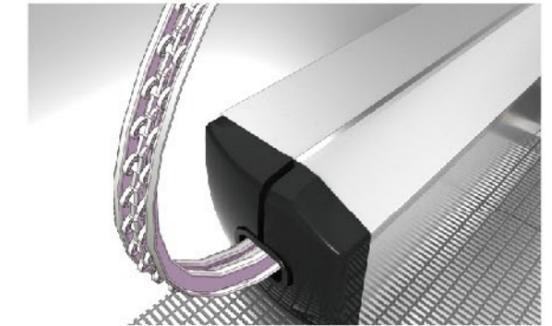
**ANTI-SLIP PEDAL DESIGN:**  
The small pedal surface has anti-slip grooves to ensure the safety and comfort of passengers when walking.



### STABLE OPERATION

#### HIGH-EFFICIENCY LARGE-RADIUS HANDRAIL GUIDE RAILS

Reduce friction loss, extend service life, and enhance overall operational efficiency.



#### ULTRA-QUIET TRACTOR

Special shock absorption technology isolates noise and vibration, creating a comfortable and quiet riding environment.

#### PLC AUTOMATIC OIL SUPPLY AND LUBRICATION CONTROL

Maintain the best lubrication state of the transmission chain, extend the service life of the transmission structure, and ensure long-term efficient operation.





# OUTDOOR ESCALATOR

CALMLY FACE THE WIND  
AND RAIN, SAFELY CONNECT  
EVERY JOURNEY

Unafraid of the harsh outdoor environment  
Freely shuttle through the changing seasons  
TOWARDS outdoor escalator  
Create a safe and comfortable outdoor travel experience.

## ENERGY-SAVING AND DURABLE

### STRONG WEATHER-RESISTANT DESIGN

Special protective processes and materials ensure that the escalator can operate stably in various extreme climates.



### COMPREHENSIVE WATER AND DUST RESISTANCE

With a high-standard IP protection level, it effectively prevents water and dust from entering, ensuring the long-term efficient operation of the equipment.



### ENERGY-SAVING DRIVE TECHNOLOGY

Adopting an advanced variable frequency drive system to manage energy consumption and significantly reduce daily operating costs.



### PRECISE BRAKING SYSTEM

Intelligent braking device, flexibly adjusting braking torque to ensure safety and stability in various environments.



# HIGH-HEIGHT ESCALATOR

Every steady and smooth climb  
Every comfortable and stable operation  
All are TOWARDS high-height escalators  
The manifestation of creating more convenient vertical transportation.



## EFFICIENT AND COMFORTABLE

### OUTSTANDING DRIVE SYSTEM

Utilizing high-efficiency drive technology. The higher altitude, the more stable operation, precisely controlling every step of the climb.

## HIGH-LEVEL SECURITY GUARANTEE

Multiple intelligent safety protection designs provide solid support for operation at extremely high altitudes, ensuring worry-free travel.

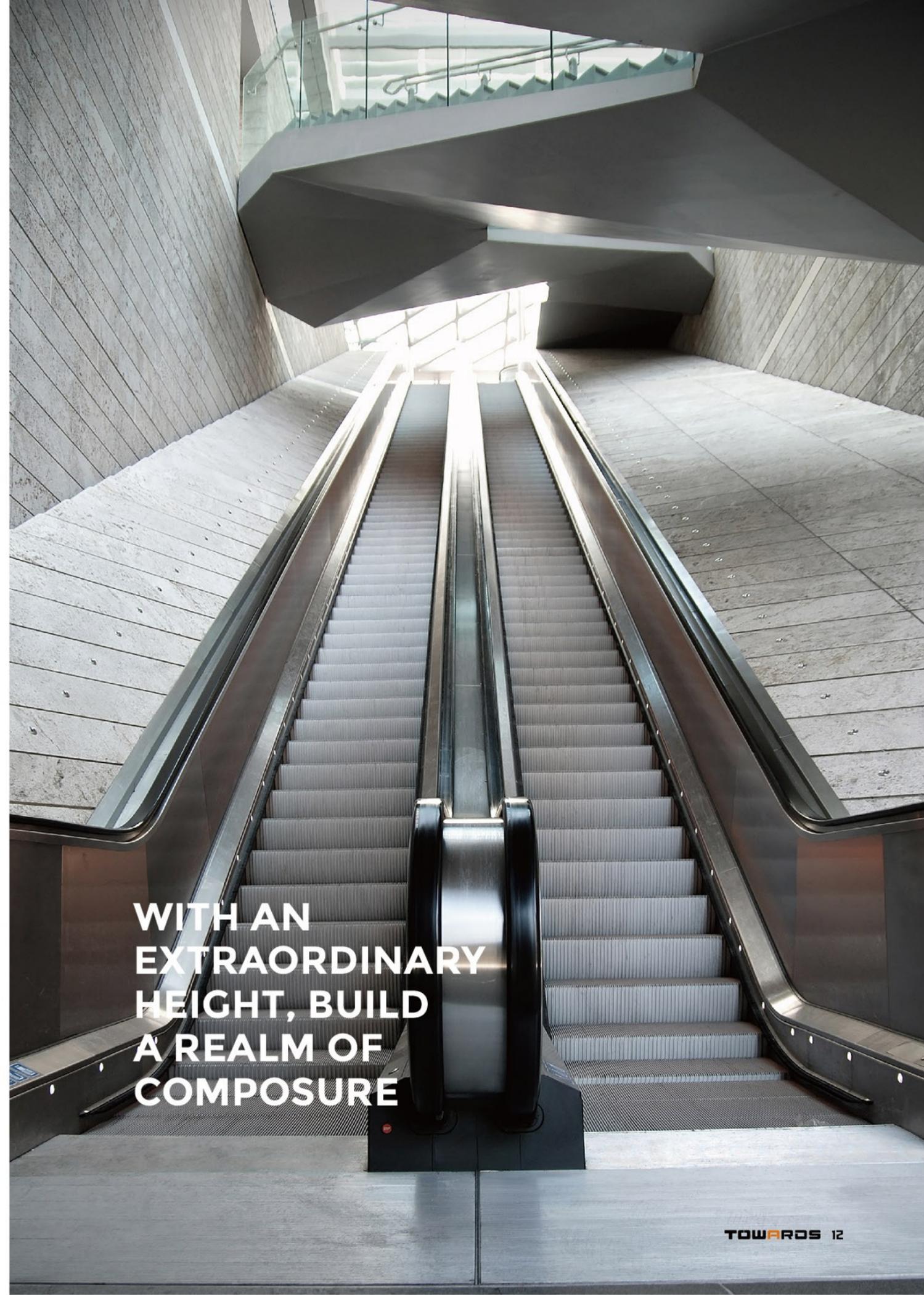
## SMOOTH OPERATION TECHNOLOGY

Advanced intelligent control technology precisely controls the start and stop processes, eliminating the discomfort caused by height.

## LARGE-SPAN LOAD-BEARING STRUCTURE

High-strength steel frame and high-rigidity structural design provide structural support for high-altitude operation.

WITH AN  
EXTRAORDINARY  
HEIGHT, BUILD  
A REALM OF  
COMPOSURE



# SAFETY DEVICE

## SAFETY DEVICE OF ESCALATOR



## SAFETY DEVICE OF MOVING WALKWAY



### Standard Safety Device

- 1.Lack of phase, error phase protection:**  
If lack of phase or error phase has been checked out, the escalator (moving walkway) will automatically stop the operation.
- 2.Motor over-load protection:**  
When the current exceeds 15% of the current rating, the escalator will automatically stop the operation.
- 3.Electrical appliance loop protection:**  
It offers the automatic circuit disconnecting device to protect the circuit and mains components of the escalator (moving walkway).
- 4.Handrail inlet protection:**  
When some foreign substance has been clipped in the handrail inlet, the escalator (moving walkway) will automatically stop the operation.
- 5.Comb plate safety device:**  
When some foreign substance has been clipped in or between the combs, the escalator (moving walkway) will automatically stop the operation.
- 6.Step sagging protection device:**  
When there is abnormal step bending, the escalator (moving walkway) will stop the operation before the step entering into the comb plate.
- 7.Broken drive-chain safety device:**  
When the drive-chain has been over-stretched or it is broken, the escalator (moving walkway) will automatically stop the operation.

- 8.Broken step chain protection:**  
When the step (plate) chain has been over-stretched or it is broken, the escalator (moving walkway) will automatically stop the operation.
- 9.Over-speed protection:**  
When there is over-speed to the escalator (moving walkway), it will automatically stop the operation.
- 10.Direction reversal protection:**  
When it comes the unintentional reversal of the direction of travel, the escalator (moving walkway) will automatically stop the operation.
- 11.Security line:**  
The yellow synthetic resin security line is located in the front position and two sides of the escalator tread so that the passengers will not tread in-between the edge of the adjacent step and the lift group lengthened skirt panel. The security line on both sides of the step is higher than the tread surface. (The moving walkway offers the selective yellow spray-painted security line.)
- 12.Emergency stop button:**  
When the button has been pressed down, the escalator (moving walkway) will stop the operation.
- 13.Skirt panel protection:**  
When some foreign substance has been clipped in between the skirt panel and the step, the escalator (moving walkway) will automatically stop the operation.

- 14.Brake protection:**  
When the electric force falls short of supply or it acts any of the safety device, the brake function goes into effect by the safety device through the spring resilience action. In this way, the escalator (moving walkway) stop the operation.
- 15.Safety inspection switch:**  
It is a safety device to prevent from the escalator starting during the inspection and maintenance.
- 16.Step illumination:**  
Illumination exists in the upper and lower ends of the escalator, in the lower part of the step in order to remind the passengers of the security matters.
- 17.Alarm bell starting device:**  
The alarm bell rings when it starts the escalator in order to remind the passengers of the security matters.
- 18.Control device for handrail breakage:**  
When the handrail is broken, the escalator will automatically stop the operation.
- 19.Handrail speed monitor:**  
When the handrail speed versus step is slower than certain percentage, the escalator (moving walkway) will stop the operation.
- 20.Skirt panel brush:**  
It is a selective safety device. The brush that has been installed between the skirt panel and the step will prevent the passengers from touching the skirt panel. (It is not merely restricted to the escalator.)
- 21.Double independent control systems:**  
It brings about the safer and the more stable escalator travel.
- 22.Step loss detection device:**  
Safety device to protect the passengers.
- 23.Tread swart switch:**  
When it opens the tread and maintains the escalator, the escalator stops and is under security condition.
- 24.Detection of brake distance:**  
If braking distance is 1.2 times longer than stipulation of national standard, after trouble locking and reset, it starts again. If necessary, please check braking system before manual reset and apply correction measures.
- 25.Brake release detection:**  
Brake adding detection switch prevents from the motor running without brake release so that it avoids burning the host or fire disaster.

### Optional Safety Device

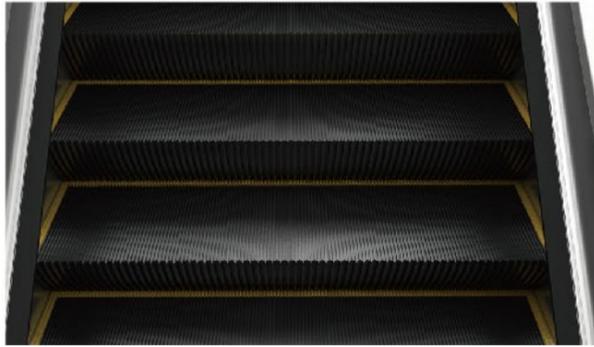
- 26.Emergency brake:**  
It prevents from the escalator slide and ensures the human security in case of the drive chain breakage or the out-of-order of the brake. (It shall be allocated when 6m<H. It is standard configuration of moving walkway.)
- 27.Fire-proof rolling door device:**  
When this device comes into action, it can stop the escalator (moving walkway) operation. It has been installed near the escalator (moving walkway).
- 28.Lower machine room drain:**  
When it exceeds the standard to water intake in the lower machine room, it will operate the automatic drain system. (outdoor type)

# DECORATION SELECTION

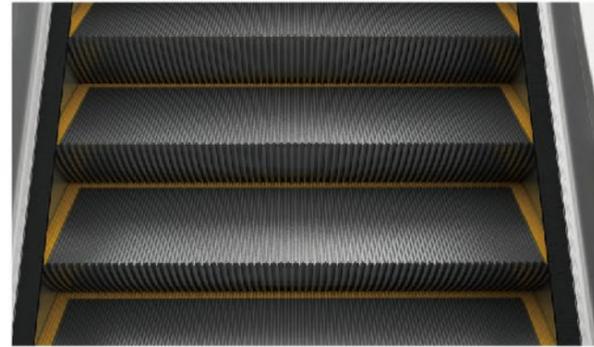
## PERSONALIZED DESIGN, SPATIAL AESTHETICS

TOWARDS offers a wide range of customized appearance services, dedicated to making escalators a bright spot in buildings and enhancing the overall visual effect.

### STEP



Black Stainless Steel  
(Standard Configuration for Indoor Escalator)

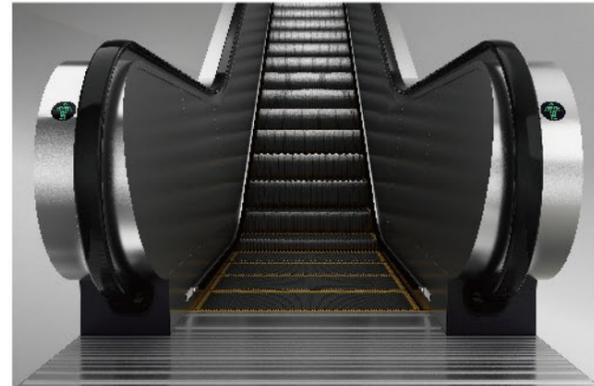


Silver Grey Aluminum Alloy  
(Standard Configuration for Outdoor Escalator)

### BASEBOARD PANEL FORM

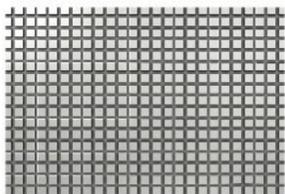


Safety Glass Colorless (Vertical Handrail Standard)



Stainless steel (Oblique Inclined Handrail Optional)

### LANDING PLATE

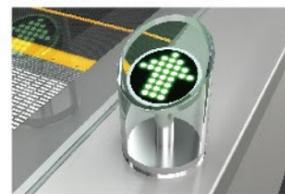


Stainless steel square patch (Standard)



Aluminium Alloy Paster/  
Integral Aluminum Alloy (Optional)

### DIRECTION INDICATOR



Transparent Plastic LED Display (Optional)

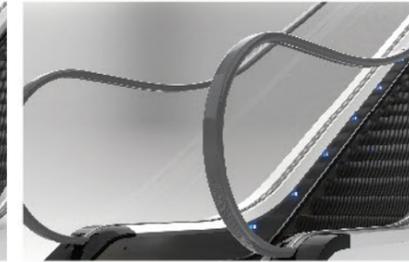


Black Plastic Dot Matrix Display (Optional)

### HANDRAIL COLOR



Black (Standard)



Gray (Optional)



Red (Optional)



Blue (Optional)

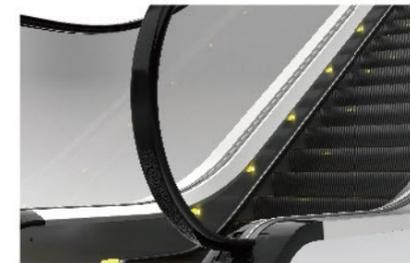


Shallow Bluish Green (Optional)



Yellow (Optional)

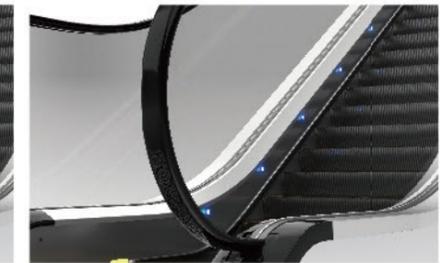
### SKIRTING PANEL LIGHTING



Yellow (Optional)

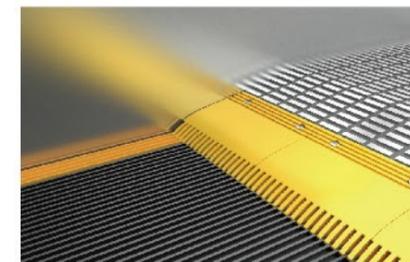


White (Optional)

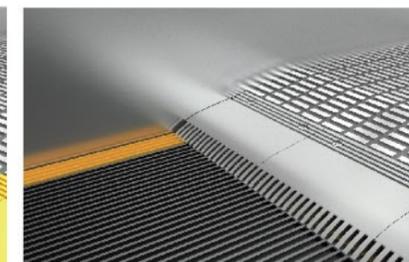


Blue (Optional)

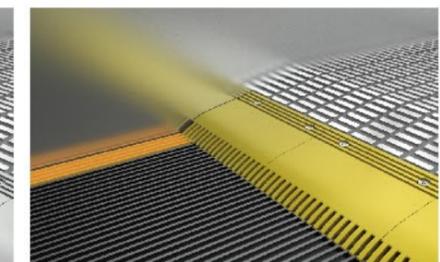
### COMB TEETH



Yellow Plastic (Standard)



Aluminum (Optional)



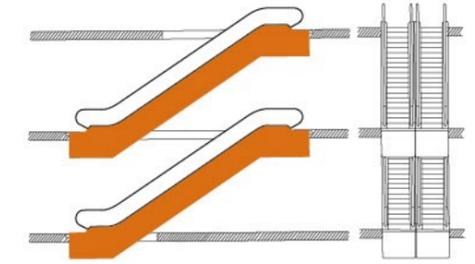
Aluminum Surface Yellow Paint (Optional)

# ESCALATORS ARRANGEMENT SCHEME



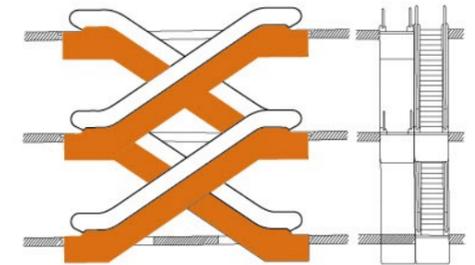
## PARALLEL, INTERRUPTED ARRANGEMENT (TWO-WAY TRAFFIC)

This arrangement is used mainly in department stores and public transport buildings with a heavy traffic volume. When there are three or more escalators, it should be possible to reverse the traveling direction according to the traffic flow. This arrangement is economical, since no inner lateral claddings are required.



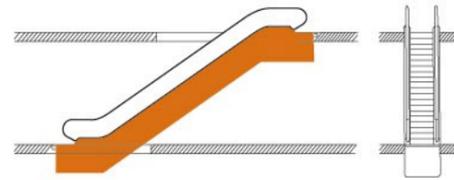
## CRISSCROSS, CONTINUOUS ARRANGEMENT (TWO-WAY TRAFFIC)

This arrangement is used mainly in major department stores, public buildings and public transport buildings where transport times between several levels should be kept to a minimum.



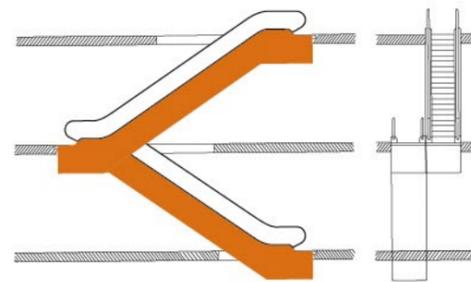
## SINGLE UNIT

The single unit used to link two levels. It is suitable for buildings with passenger traffic flowing mainly in one direction. Flexible adjustment to traffic flow (e.g., up in the morning and down in the evening) is possible.



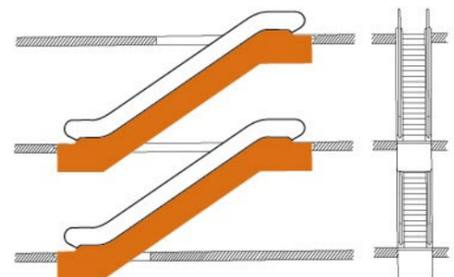
## CONTINUOUS ARRANGEMENT (ONE-WAY TRAFFIC)

This arrangement is used mainly in smaller department stores to link three sales levels. It requires more space than the interrupted arrangement.



## INTERRUPTED ARRANGEMENT (ONE-WAY TRAFFIC)

This arrangement is somewhat inconvenient for users, but advantageous for department store owners, since the short detour to the next unit and the spatial separation between up and down travel is ideal for leading customers past strategically placed advertising displays.



## STEP WIDTH



Step width 600mm

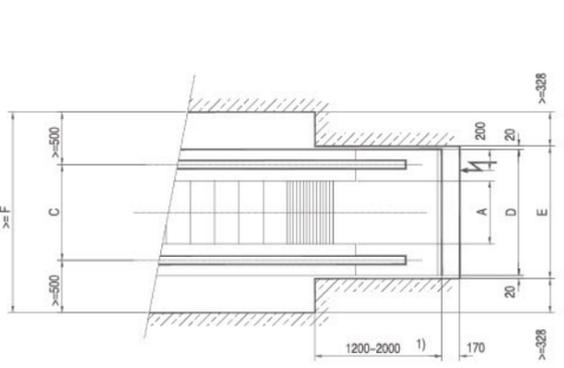
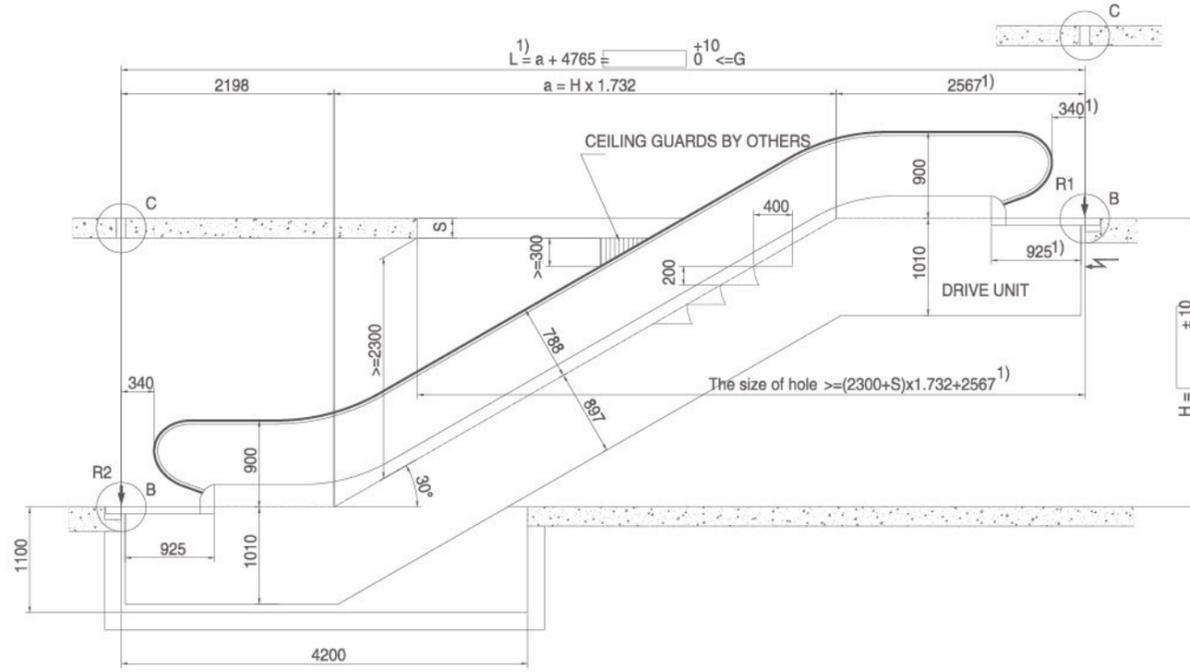


Step width 800mm

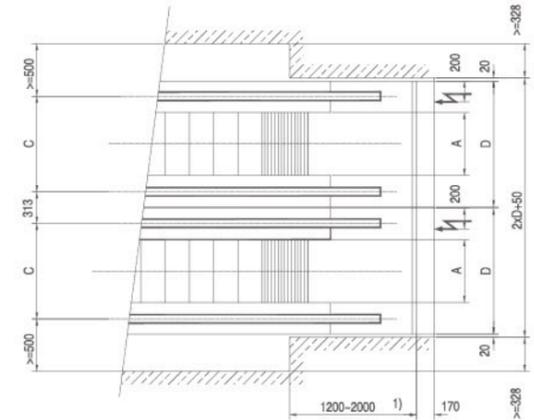


Step width 1000mm

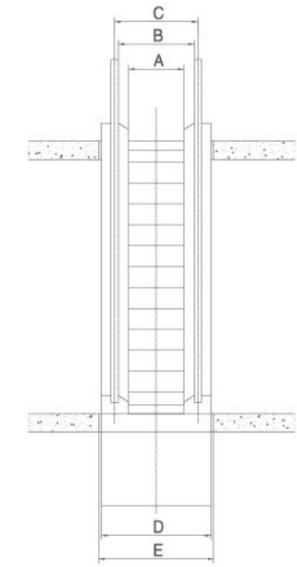
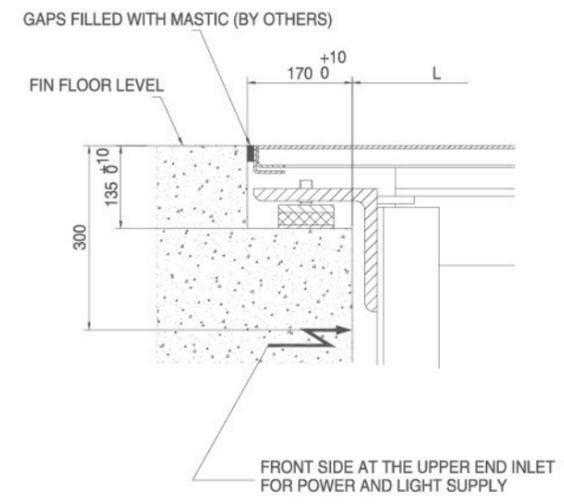
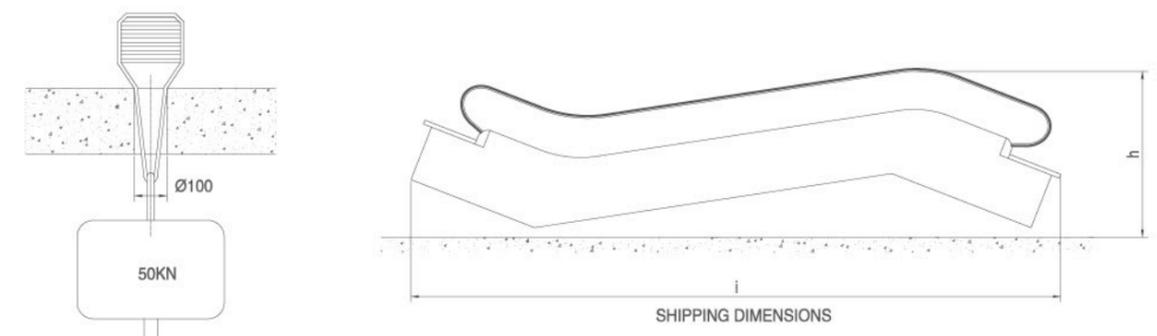
# TS200-30K COMMERCIAL ESCALATOR CONSTRUCTION LAYOUT DRAWING



SINGLE



PARALLEL



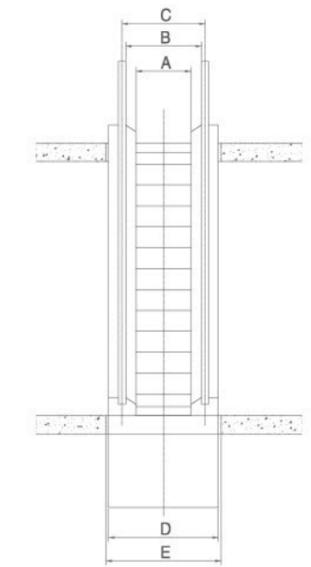
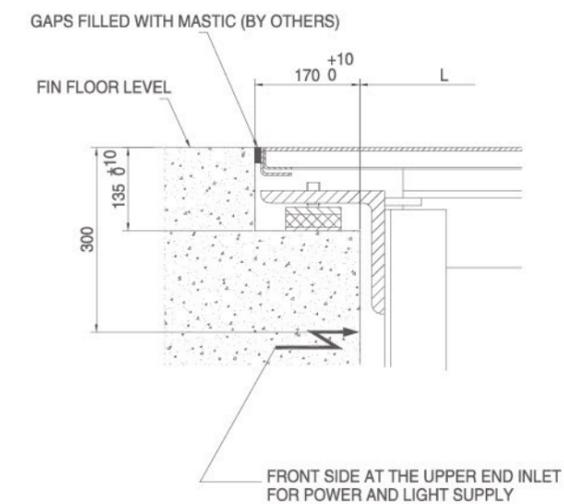
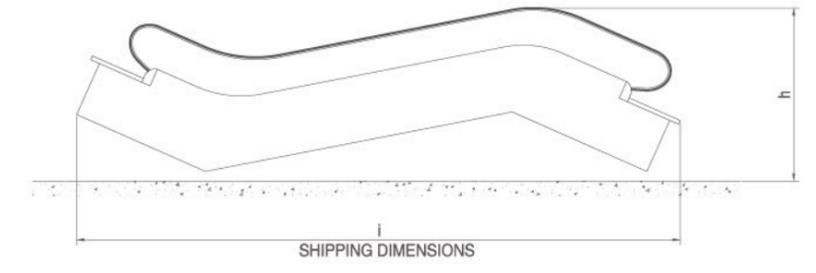
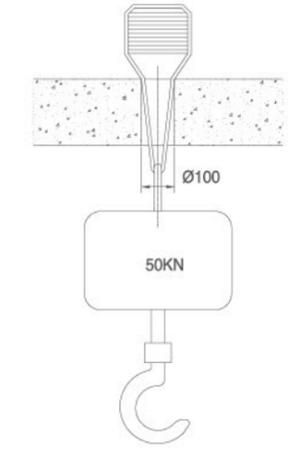
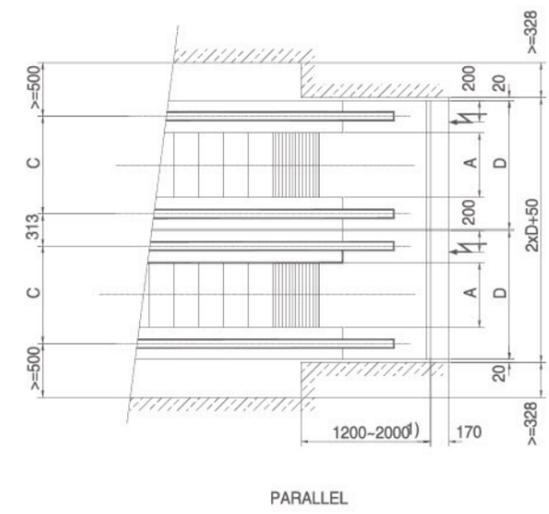
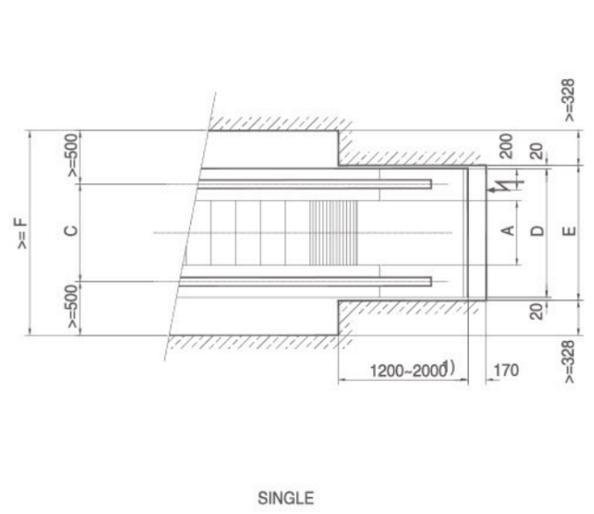
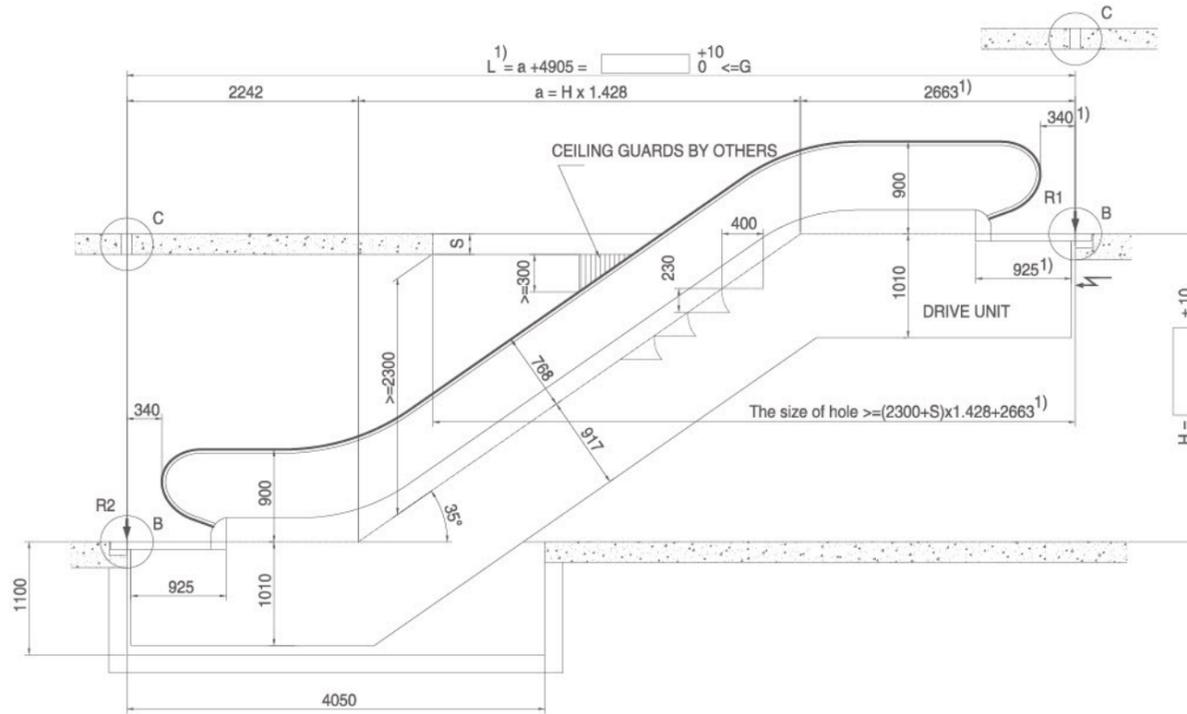
Type	Rise	Weight	Support Loads		Power kw	Transport size	
			R1	R2		H	I
30-60K 3240 man/hour	H	KN	KN	KN	V=0.5m/s	H	I
	3000	57	49	45	5.5	2171	11213
	3500	61	53	48	5.5	2216	12200
	4000	64	56	52	5.5	2252	13190
	4500	67	59	55	5.5	2282	14181
	5000	71	63	58	5.5	2307	15173
30-80K 4800 man/hour	5500	74	66	61	5.5	2328	16166
	6000	77	69	64	5.5	2346	17159
	3000	59	56	51	5.5	2064	10823
	3500	63	60	55	5.5	2100	11813
	4000	66	63	59	5.5	2128	12804
	4500	70	67	63	5.5	2151	13796
30-100K 6000 man/hour	5000	73	71	66	8	2170	14789
	5500	77	75	70	8	2186	15784
	6000	80	79	74	8	2200	16779
	3000	62	63	59	5.5	2064	10823
	3500	66	68	63	8	2100	11813
	4000	70	72	67	8	2128	12804
30-100K 6000 man/hour	4500	73	77	72	8	2151	13796
	5000	77	82	76	11	2170	14789
	5500	81	86	81	11	2186	15784
	6000	85	91	85	11	2200	16779

mm size units, individual size may be revised

	Step width		
	1000mm	800mm	600mm
A: Step width	1000	800	600
B: Width between handrails	1157	957	757
C: Handrail center distance	1237	1037	837
D: Width of escalator	1540	1340	1140
E: Width of shaft	1580	1380	1180
F: Minimum spacing	2236	2036	1836
G: Maximum outreach	16000	17200	18900

- 1.If L>G, an intermediate support is required, please consult.
- 2.If step width is 600mm, upper truss shall increase 417mm.
- 3.Detailed motor power parameters may check with our technical department.

# TS200-35K COMMERCIAL ESCALATOR CONSTRUCTION LAYOUT DRAWING



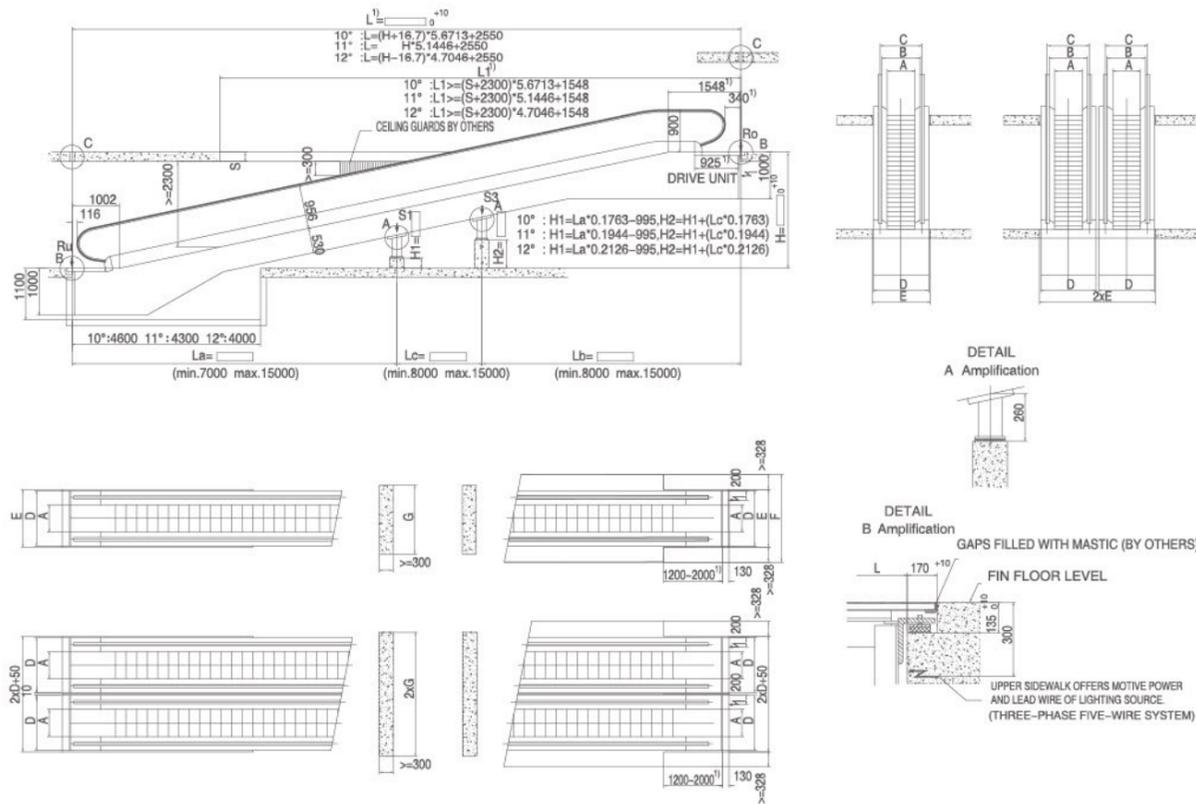
Type	Rise	Weight	Support Loads		Power kw	Transport size	
			R1	R2		H	I
35-60K 3240 man/hour	3000	53	46	42	5.5	2289	10493
	3500	56	48	44	5.5	2344	11344
	4000	59	51	47	5.5	2388	12197
	4500	62	54	50	5.5	2424	13053
	5000	64	57	52	5.5	2454	13911
	5500	67	60	55	5.5	2480	14770
35-80K 4800 man/hour	6000	70	63	58	5.5	2502	15631
	3000	54	51	47	5.5	2175	10107
	3500	57	54	50	5.5	2218	10960
	4000	60	58	54	5.5	2252	11816
	4500	64	61	57	5.5	2280	12674
	5000	67	65	60	8	2303	13533
35-100K 6000 man/hour	5500	70	68	63	8	2322	14395
	6000	73	71	66	8	2339	15257
	3000	57	58	54	5.5	2175	10107
	3500	60	62	58	8	2218	10960
	4000	64	66	61	8	2252	11816
	4500	67	70	65	8	2280	12674
35-100K 6000 man/hour	5000	70	74	69	11	2303	13533
	5500	74	78	73	11	2322	14395
	6000	77	82	76	11	2339	15257

	Step width		
	1000mm	800mm	600mm
A: Step width	1000	800	600
B: Width between handrails	1157	957	757
C: Handrail center distance	1237	1037	837
D: Width of escalator	1540	1340	1140
E: Width of shaft	1580	1380	1180
F: Minimum spacing	2236	2036	1836
G: Maximum outreach	16000	17200	18900

- 1.If L>G, an intermediate support is required, please consult.
- 2.If step width is 600mm, upper truss shall increase 417mm.
- 3.Detailed motor power parameters may check with our technical department.

mm size units, individual size may be revised

# TS300-I MOVING WALKWAYS CONSTRUCTION LAYOUT DRAWING (10°-12°)



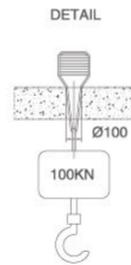
Support		
Without mid-support	Single mid-support	Double mid-supports
$Ro=L*q+M$	$Ro=Lb*q+M$ $Ru=La*q+N$	$Ro=Lb*q+M$ $Ru=La*q+N$
$Ru=L*q+N$	$S1=(La+Lb)*q*1.3$	$S1=(La+Lc)*q*1.3$ $S2=(Lb+Lc)*q*1.3$

Tiltangle	Rise		Mid-support		La	Lb	Lc
	From	To	S1	S2			
10°	1273	2154	-	-	-	-	-
	2155	3388	1	-	7000	L-7000	-
	3389	4799	1	-	L-15000	15000	-
	4800	6000	1	1	7000	15000	L-22000
11°	1423	2394	-	-	-	-	-
	2395	3754	1	-	7000	L-7000	-
	3755	5309	1	-	L-15000	15000	-
	5310	6000	1	1	7000	15000	L-22000
12°	1572	2634	-	-	-	-	-
	2635	4122	1	-	7000	L-7000	-
	4123	5822	1	-	L-15000	15000	-
	5823	6000	1	1	7000	15000	L-22000

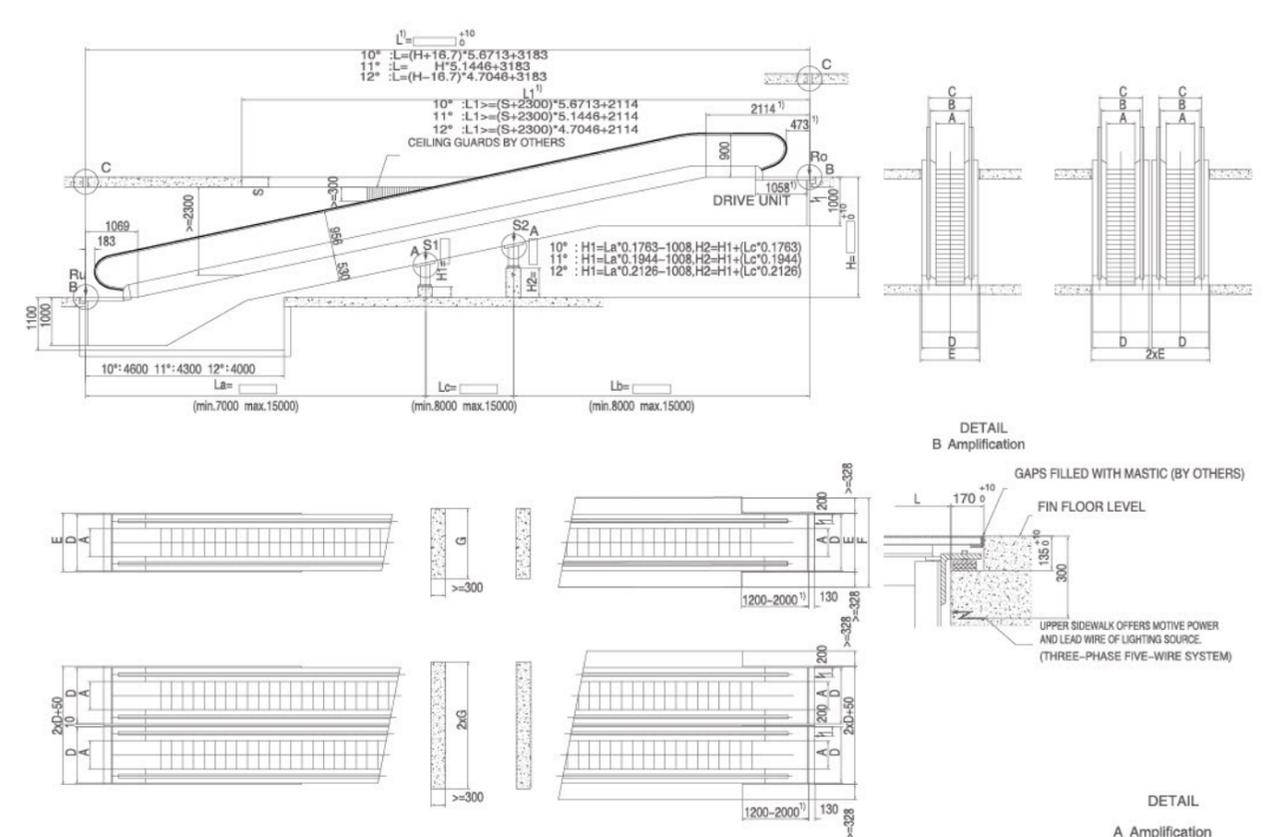
Supported by force	q	M	N
YSS80	0.0039	9.5	4.5
YSS100	0.0045	11	5

	YSS80	YSS100
A	800	1000
B	957	1157
C	1037	1237
D	1340	1540
E	1380	1580
F	2036	2236
G	1300	1500

1. Use the tread with 133mm pitch.
2. Upper truss shall increase 417mm for double-drive.
3. Detailed motor power parameters may check with our technical department.



# TS300-II MOVING WALKWAYS CONSTRUCTION LAYOUT DRAWING (10°-12°)



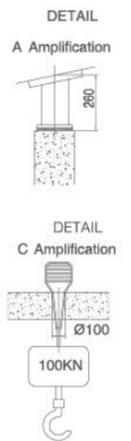
Support		
Without mid-support	Single mid-support	Double mid-supports
$Ro=L*q+M$	$Ro=Lb*q+M$ $Ru=La*q+N$	$Ro=Lb*q+M$ $Ru=La*q+N$
$Ru=L*q+N$	$S1=(La+Lb)*q*1.3$	$S1=(La+Lc)*q*1.3$ $S2=(Lb+Lc)*q*1.3$

Tiltangle	Rise		Mid-support		La	Lb	Lc
	From	To	S1	S2			
10°	1273	2154	-	-	-	-	-
	2155	3388	1	-	7000	L-7000	-
	3389	4799	1	-	L-15000	15000	-
	4800	6000	1	1	7000	15000	L-22000
11°	1423	2394	-	-	-	-	-
	2395	3754	1	-	7000	L-7000	-
	3755	5309	1	-	L-15000	15000	-
	5310	6000	1	1	7000	15000	L-22000
12°	1572	2634	-	-	-	-	-
	2635	4122	1	-	7000	L-7000	-
	4123	5822	1	-	L-15000	15000	-
	5823	6000	1	1	7000	15000	L-22000

Supported by force	q	M	N
YSS80	0.0039	9.5	4.5
YSS100	0.0045	11	5

	YSS80	YSS100
A	800	1000
B	957	1157
C	1037	1237
D	1340	1540
E	1380	1580
F	2036	2236
G	1300	1500

1. Use the tread with 266mm pitch.
2. Upper truss shall increase 417mm for double-drive.
3. Detailed motor power parameters may check with our technical department.



# PROFESSIONAL SERVICE

TOWARDS has always adhered to the service philosophy of putting customers first, providing one-stop professional services throughout the entire life cycle, from design, production, installation to maintenance and upgrade. With an efficient and professional service attitude, and with sincerity and professionalism, we strive to ensure customers' peace of mind throughout their entire life cycle.



## WITH CARE AND DEDICATION, YOU'LL HAVE NO WORRIES THROUGHOUT THE JOURNEY



### WORLDWIDE NETWORK LAYOUT

TOWARDS has established a complete spare parts warehousing system in major countries with agencies across the world to ensure comprehensive service coverage and rapid response without delay.



### 24-HOUR SERVICE HOTLINE

We have opened a 24-hour customer hotline all day long. Our professional team is on standby at all times and will handle emergencies immediately.



### REGULAR INSPECTION AND MAINTENANCE

Regularly dispatch professional maintenance personnel to proactively inspect the operational status of the equipment, identify and eliminate potential hazards in advance, and ensure the safe operation of the equipment.



### CUSTOMIZED MAINTENANCE AND REPAIR SERVICES

Based on the actual needs of customers, we formulate personalized maintenance plans, tailor professional maintenance solutions, and track the entire process to ensure efficient operation.