

Escalator and Passenger Conveyor

Solutions



Exclusive US Market Edition



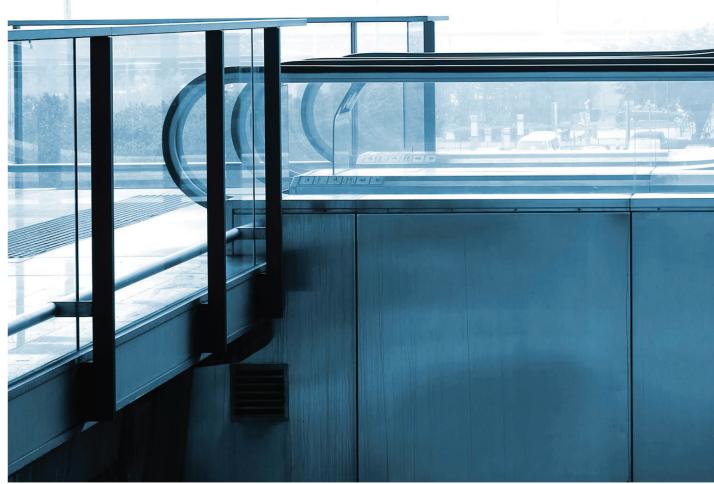
ULTIMATE SOLUTION FOR VERTICAL TRANSPORTATION

Creative, professional yet luxury elevator and escalator provider

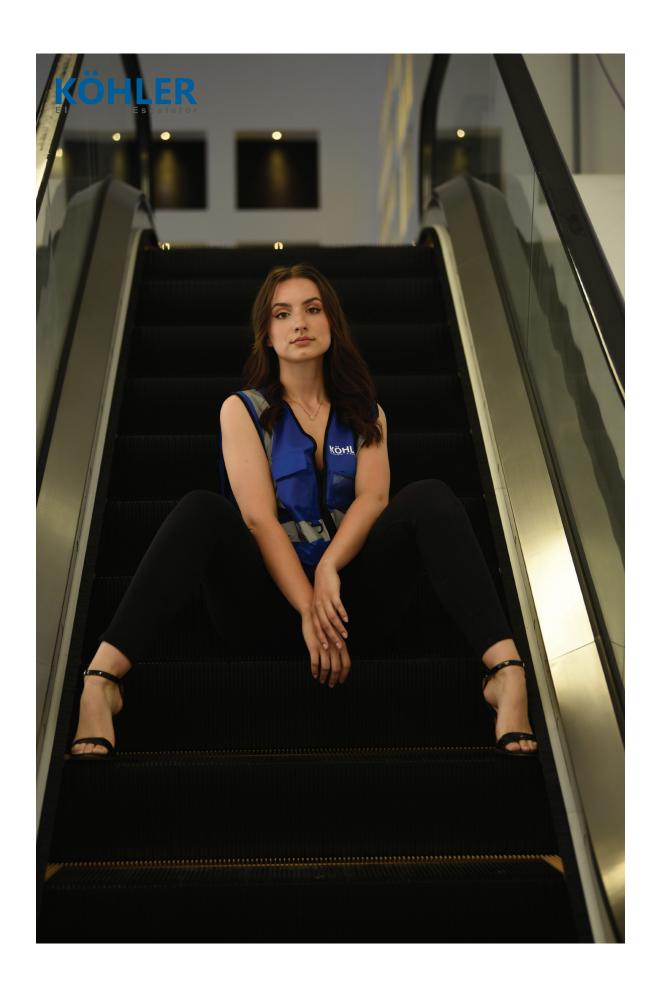
KÖHLER Elevator and Escalator mission is to improve our client's sense of gracious living in every experience they have with our products or services.

To make this happen, we try to live on the leading edge in the design and technology of product and process. And we maintain a single level of quality regardless of price point across our many product and service categories.

We set a standard of excellence, yet drive for continuous improvement as we respond to the dynamic of the local marketplace across the world.







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KÖHLER Profile

Driven by a market need for custom-tailored escalator units, KÖHLER escalator solutions provides flexible designs that will fit into a wide range of hoistways — whether for commercial buildings or public transportation usage, KÖHLER provides the optimal solution for any new construction or modernization project.

KÖHLER provides you with many design options. Drawing on the unique capabilities of our German design centers, we take full advantage of precise engineering coupled with efficient manufacturing expertise. Proven engineering strength, global sourcing, and field-tested quality, along with our willingness to accept challenging requirements, set us apart from the competition.

Over the past decades, KÖHLER laid the groundwork for today's product offerings by combining the global leadership of our diverse operating companies.

KÖHLER takes pride in being the leading open architecture provider in the elevator industry. Equipment, installation, and service choices are made by building owners and their representatives. sfaction and the knowledge of a job well done over decades of service.









KÖHLER Escalator and Passenger Conveyor

KÖHLER provides complete solution for Escalator and Passenger conveyor. we have gathered highest quality and long lasting components for our escalator and passenger conveyor, we provide commercial and public transportation usage Escalator and Passenger conveyor.

Public transportation

KÖHLER has gathered the most high-tech, top quality and long lasting equipments and components for public transportation faculties that brings highest performance and efficiency all day long (247/). also it is produced with the matching and required IP ratings.

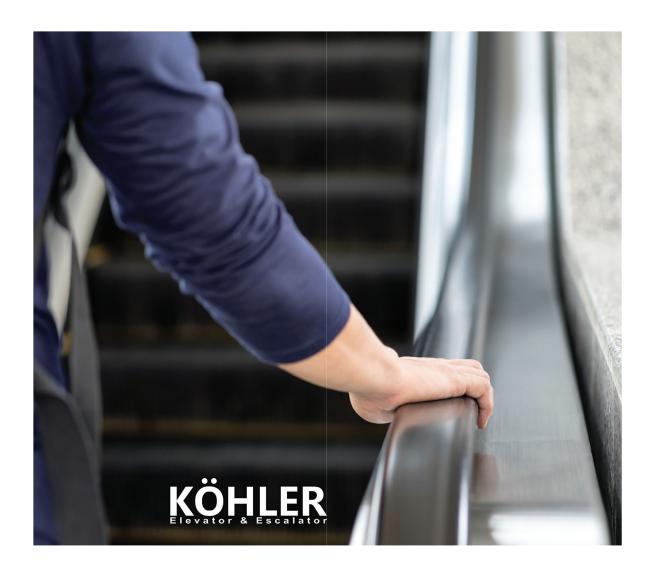
Commercial

flexible to interchange in the markets. Therefore, it is convenient for technicians to repair and maintain; Moreover, it significantly reduces repair and maintenance cost.

Comfortable

Human Oriented Enabling you to live freely

By integrating the concept of human-oriented design, we put our efforts into manufacturing flawless products in details and design. Through numerous tests and experiments, we have finally reached the peak of safety, performance and stability in our escalators, and our products make you feel very comfortable, thus providing you an enjoyable experience in your daily life.





High-performance control system

KÖHLER escalators redefines control concept in the industry. By applying modular designs, our control system is more compact and integrated runs more steadily than any similar system. Outstanding digital processing capacity and operation efficiency improves energy-saving effects of our escalators to the greatest extent.

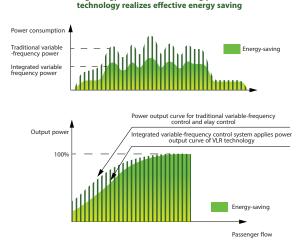
A complete lightning protection design is built in the escalator control system, with CPU+OSP redundant technology applied in its controller, the system reliability is fully guaranteed. The control system completely complies with EMC (electromagnetic compatibility) standard.



By detecting passenger flow and automatically adjusting the speed curve, KÖHLER escalators can achieve effective energy-saving in the whole process of its operation. By detecting DC busbar voltage of the driver and automatically feeding regenerated energy of the system back to the power grid, KÖHLER escalators greatly improve their energy-saving effects.



Saving energy in the entire traveling process: VLR



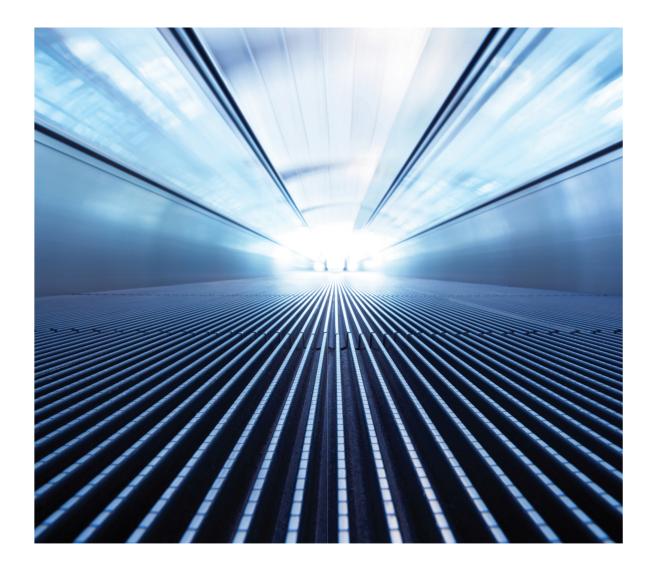
Convenient remote monitoring system

The system can be connected with customers monitoring system via RS485 port, in order to carry out real-time monitoring of escalator operation messages, which is very convenient for the escalator maintenance and right approach to demands of modern intelligent building control system for escalators.

Energy Saving

Creating new era of energy saving

We always put environmental protection as one of our utmost important Concerns when designing and developing our products. In this regard we implement a new type of control system integrating converter and microcomputer-based control board. In this complex the drive system upgrades driving efficiency of the escalator significantly and guarantees low energy consumption, thus achieving unprecedented environmental protection.



Multiple safety protection

Safety devices are provided at each component of the escalator. The control system has powerful device-testing and fault-diagnosis capabilities and improves safety performance of the escalators in a passive yet effective manner.

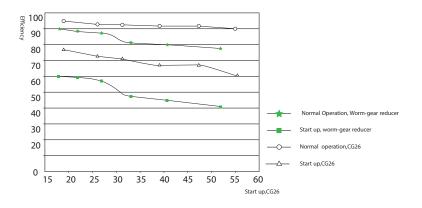
Comfortable ride feeling

By applying variable-frequency drive technology specially designed for the escalator and using new generation of AC vector controller-voltage regulator-speed governor technology, the escalators can achieve smooth and stable transition during automatic acceleration and deceleration adjustment and at the same time they travel more stable, resulting in comfortable and smooth ride experience.

High-performance traction machine

KÖHLER escalator reducer adopts ZC drive and has the features of high torque, small size, low noise, low vibration and steady operation. Its noise level is lower than 57dB and its drive efficiency during normal operation is higher than 88%. The motor used has a variable-frequency drive, which provides stable start-up and applies braking and stopping force in a smooth yet effective manner to escalator. With power consumption of S.S-1SkW,

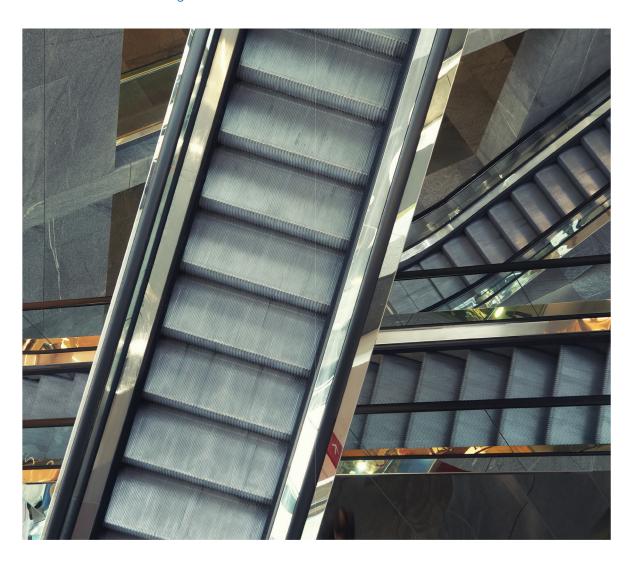
CG26 worm-gear-helical-gear reducer has the advantages of both worm- gear-worm-drive and helical gear drive. The high-speed end is provided with worm-gear-worm-drive and has the characteristics of low noise, low vibration and high safety coefficient. The low-speed end is provided with helical-gear drive. This configuration guarantees high driving efficiency and energy saving characteristics of the entire traction machine. Driving efficiency of the traction machine is as high as 92% and power range is 1137-kW.



High Efficiency

Scientific integrated structure installation and commissioning is easier and more convenient

We believe that functions of an escalator are not necessarily proportional to the operation complexity. Therefore, our escalators are designed to apply an integrated structure, so that the equipments are run more precise and more efficient and, which in turn allows easier and more convenient commissioning.



Standard configuration and optional configuration of parts

Parts	Standard Configuration	Optional Configuration
Landing Board	Aluminur	
Step	Aluminum Series	Black Aluminum Series
Handrail Color	Black Red Yello	w Green Blue
Traction Machine	Gea	red



Thermoplastic urethane handrails provide diverse solutions for all of our custom requirements.

- Smooth tracking ensures longer operational life of all handrail & drive components.
- Easy to clean no harsh solvents required.
- Superior vandalism resistance.
- Recyclable.

POLYURETHANE ROLLERS

Our rollers are manufactured using high-grade materials and are made of polyurethane tread material to provide optimum balance between performance and durability

Advantage of KÖHLER Escalator & Passenger Conveyor

- Advanced Electrical and mechanical technology
- Integrated structure design
- Safety, reliability, energy saving, riding comfort
- Environmental features and variety configuration
- Flexible in matching the appearance of the buildings

Rise (mm)	Escalator: 8' ~ 88' Passenger Conveyor: 8' ~ 40'
Speed m/s	100fpm (0.5m/sec) - 150fpm (0.75/sec)
Inclination Angle	Escalator: 30° - 35° Passenger Conveyor: 0° - 10° - 11° - 12°
Step Width (mm)	Escalator: 1'-11 5/8" (600mm) - 2'-7 1/2" (800mm) - 3'-3 3/8" (1000mm) Passenger Conveyor: 2'-7 1/2" (800mm) - 3'-3 3/8" (1000mm) - 3'-11 1/4" (1200mm)
Installation Position	In door - Out door







Scheming Guide

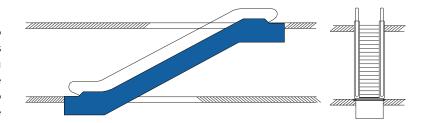
Logical Positioning Systematic Layout

Factors influencing escalator arrangement:
Building structure Installation site and direction of traffic flow
Traffic volume intensity Area of application(commercial sector pubic transport)
The customers special requirements

The following arrangements are possible:

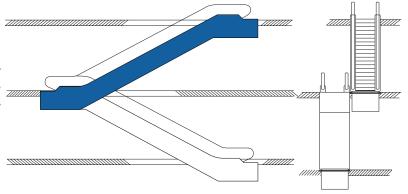
Single unit

The single unit is 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.



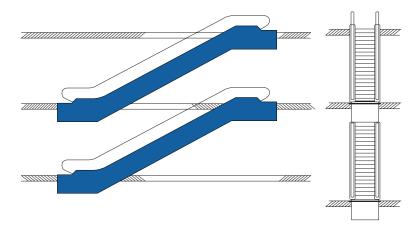
Continuous arrangement (one-way traffic)

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



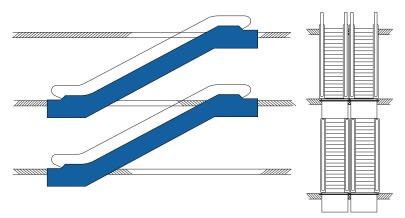
Interrupted arrangement (one-way traffic)

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.



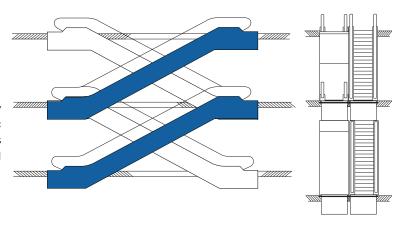
Parallel,interrupted arrangement (two-way traffic)

This arrangement is used mainly in department stores and pubic 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, sine no inner lateral claddings are required.



Crisscross,continuous arrangement (two-way traffic)

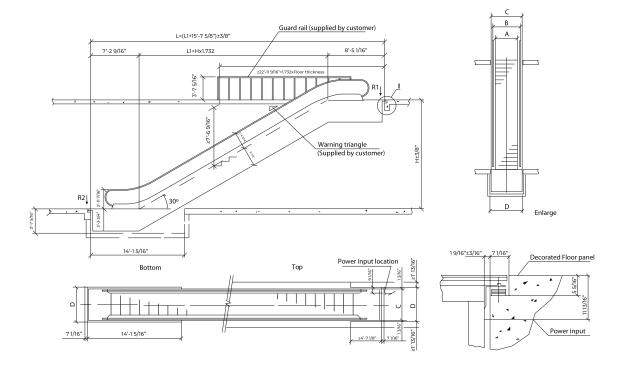
This arrangement is used mainly in major department stores, public buildings and public transport buildings where transport times between several levels should be kept to a minimum.



Escalator/Shaft Plan

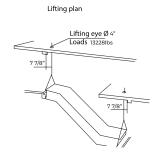
Series 1200-30-2

Commercial Escalator



Model			_
Basic dimensions	HD-1200-30-60	HD-1200-30-80	HD1200-30-100
A Step Width	24"	32"	40"
B Central distance of handrail	33"	41"	49"
C Exterior width of the passenger conveyor	47"	55"	63"
D Min, width of pit	50"	57"	65"

D Mill, Width of pit			50		37		,,
Rated speed 1	100fpm (0.5m	/s)	Angle of inclination (a=30°)				
		عماست مدد عما	Support	ing load	Motor	Shipping di	imensions
Model	Rise (inch)	(lbs)	per	untit	power		
		(lbs) -	R1 (kN)	R2 (kN)	(kW)	1	h
	9' - 10 1/8"	12566	46	41	5.5	35'- 9 1/8"	9' - 1/4"
	11'- 5 13/16	13227	49	44	5.5	38' - 8 9/16"	9' - 1 7/16"
HD-1200-30-60	13'- 1 1/2"	14109	52	47	5.5	41'- 11 15/16"	9' - 2 5/8"
	14'- 9 3/16"	14991	56	50	5.5	45' - 6 1/16"	9' - 3 7/16"
(4500p/h)	16' - 47/8"	15652	59	53	5.5	48' - 9 1/16"	9' - 3 13/16"
	18' - 9/16"	16534	62	56	5.5	52' - 7/16"	9' - 4 5/8"
	19' - 8 1/4"	17416	65	59	5.5	55' - 3 3/8"	9' - 5"
	9' - 10 1/8"	13007	52	47	5.5	35'- 9 1/8"	9' - 1/4"
	11'- 5 13/16"	13889	56	50	5.5	38' - 8 9/16"	9'-17/16"
HD-1200-30-80	13'- 1 1/2"	14770	62	54	5.5	41'-11 15/16"	9' - 2 5/8"
	14' - 9 3/16"	15652	64	57	5.5	45' - 6 1/16"	9' - 3 7/16"
(6750p/h)	16' - 47/8"	16314	68	60	7.5	48' - 9 1/16"	9' - 3 13/16"
	18' - 9/16"	18077	74	66	7.5	52' - 7/16"	9' - 4 5/8"
	19' - 8 1/4"	18960	78	69	11	55' - 3 3/8"	9'-5"
	9' - 10 1/8"	13889	59	53	5.5	35'- 9 1/8"	9' - 1/4"
	11'- 5 13/16"	14770	64	57	5.5	38' - 8 9/16"	9'-17/16"
HD-1200-30-100	13'- 1 1/2"	15652	68	61	7.5	41'- 11 15/16"	9' - 2 5/8"
	14'- 9 3/16"	16534	73	65	7.5	45' - 6 1/16"	9'-37/16"
(9000p/h)	16' - 47/8"	18298	79	71	7.5	48' - 9 1/16"	9'-3 13/16"
	18' - 9/16"	17196	84	75	11	52' - 7/16"	9' - 4 5/8"
	19' - 8 1/4"	20282	88	79	11	55' - 3 3/8"	9' - 5"



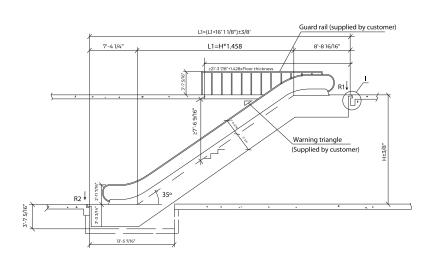
Remarks:

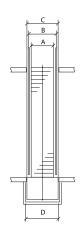
1. When the step width is 24", the up horiontal section of the escalator will be increased by 20"

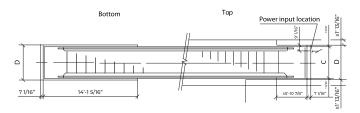
2.The maximum designed height of the escalator is 19' - 8 1/4"

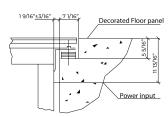
Series 1200-35-2

Commercial Escalator







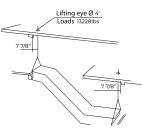


Enlarge

Model	_		
Basic dimensions	HD-1200-30-60	HD-1200-30-80	HD1200-30-100
A Step Width	24"	32"	40"
B Central distance of handrail	33"	41"	49"
C Exterior width of the passenger conveyor	47"	55"	63"
D Min, width of pit	50"	57"	65"

Rated speed 100fpm (0.5m/s)			Angle of inclination (a=30°)				
Model	Rise (inch)	Net weight		Supporting load peruntit		Shipping dimensions	
		(lbs)	R1 (kN)	R2 (kN)	(kW)	1	h
	9' - 10 1/8"	11904	43	39	5.5	33'-413/16"	9' - 4 3/16'
	11'- 5 13/16"	12566	46	41	5.5	36' - 2 1/4"	9' - 5 3/4"
HD-1200-35-60	13'- 1 1/2"	13227	49	44	5.5	39' - 1/8"	9'-6 15/16
110 1200 33 00	14'- 9 3/16"	14109	52	46	5.5	41'- 9 15/16"	9' - 7 3/4"
(4500p/h)	16' - 47/8"	14770	54	49	5.5	44' - 7 13/16"	9'-8 15/16
	18' - 9/16"	15432	57	51	5.5	47' - 5 11/16"	9' - 9 5/16'
	19' - 8 1/4"	16094	60	54	5.5	50' - 3 9/16"	9' - 10 1/8'
	9' - 10 1/8"	12345	49	44	5.5	33'-413/16"	9' - 4 3/16'
	11'- 5 13/16"	13227	52	47	5.5	36' - 2 1/4"	9' - 5 3/4"
HD-1200-35-80	13'- 1 1/2"	13889	56	50	5.5	39' - 1/8"	9'-615/16
115 1200 55 00	14' - 9 3/16"	14550	59	53	5.5	41'-9 15/16"	9' - 7 3/4"
(6750p/h)	16' - 47/8"	15432	62	56	7.5	44' - 7 13/16"	9'-815/16
	18' - 9/16"	16093	65	59	7.5	47' - 5 11/16"	9' - 9 5/16
	19' - 8 1/4"	16534	69	61	11	50' - 3 9/16"	9' - 10 1/8'
	9' - 10 1/8"	13227	56	50	5.5	33'-413/16"	9' - 4 3/16'
	11'- 5 13/16"	14110	60	53	5.5	36' - 2 1/4"	9' - 5 3/4"
HD-1200-30-100	13'- 1 1/2"	14770	67	57	7.5	39' - 1/8"	9'-615/16
	14' - 9 3/16"	15652	67	60	7.5	41'- 9 15/16"	9' - 7 3/4"
(9000p/h)	16' - 47/8"	16314	77	64	7.5	44' - 7 13/16"	9'-8 15/16
	18' - 9/16"	18077	77	69	11	47' - 5 11/16"	9' - 9 5/16
	19'-8 1/4"	18739	81	72	11	50' - 3 9/16"	9' - 10 1/8





- Remarks:

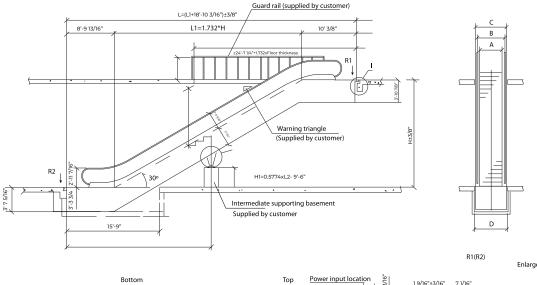
 1. When the step width is 24", the up horiontal section of the escalator will be increased by 20"

 2. The maximum designed height of the escalator is 19' 8 1/4"

Escalator/Shaft Plan

Series 1200-30-3

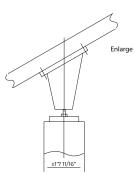
Commercial Escalator



	L ≥1-7' 11/16	/ اعِ		が 7 1/16" Decorated Floor panel
7 1/16"		25-10.708" 7.71	0°° C°° C°° C°° C°° C°° C°° C°° C°° C°°	Power input

Model			
Basic dimensions	HD-1200-30-60	HD-1200-30-80	HD1200-30-100
A Step Width	600	800	1000
B Central distance of handrail	838	1038	1238
C Exterior width of the passenger conveyor	1200	1400	1600
D Min, width of pit	1260	1460	1660

Rated speed 1	Angle of inclination (a=30°)					
Model	Rise (inch)	Net weight		Supporting load peruntit		Motor powe (kW)
		(lbs)	R1 (kN)	R2 (kN)	S1 (kN)	_
	18' - 9/16"	15432	62	56		7.5
HD-1200-30-60	19' - 8 1/4"	16534	65	59		7.5
	21'-3 7/8"	17637	64	56	85	7.5
(4500p/h)	22'-11 9/16"	18739	69	61	90	7.5
	24' - 7 1/4"	19841	74	66	95	7.5
	18' - 9/16"	17196	70	64		7.5
HD-1200-30-80	19' - 8 1/4"	18298	75	69		7.5
	21' - 3 7/8"	18739	69	61	90	7.5
(6750p/h)	22' - 11 9/16"	19841	74	66	95	7.5
	24'7 1/4"	20944	79	71	100	11
	18' - 9/16"	19180	82	74		11
HD-1200-30-100	19' - 8 1/4"	20282	85	79		11
(9000p/h)	21' - 3 7/8"	21385	74	66	100	11
	22' - 11 9/16"	22487	79	71	105	15
	24'7 1/4"	23589	84	76	110	7.5*2



- Remarks:

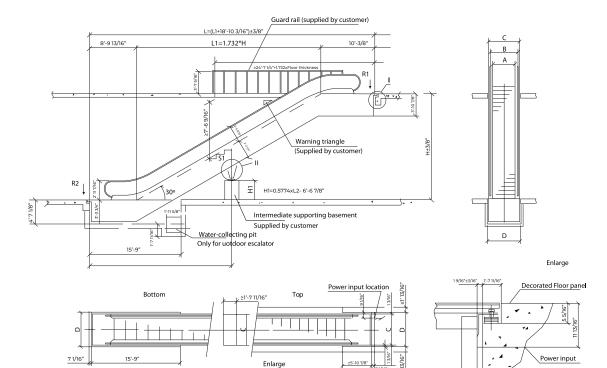
 1. When the step width is 24" the up horiontal section of the escalator will be increased by 20"

 2. When the escalator is double-drive, the up horizontal section of the escalator will be increased by 20"

 3. The maximum height of the escalator is 24' 7 1/4"

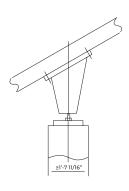
Series 1200–30

Public Transport Escalator



Model		
Basic dimensions	HZ880	HZ8100
A Pallet Width	32"	39"
B Central distance of handrail	41"	49"
C Exterior width of the passenger conveyor	55"	63"
D Min, width of pit	57"	65"

Rated spee	Angle of inclination (a=30°)					
	Rise (inch)	Net weight (lbs)	Support	ing load		Motor power
Model			peruntit			(kW)
			R1 (kN)	R2 (kN)	S1 (kN)	_
	21' - 3 7/8"	9000	84	76	105	11
	22' - 11 9/16"	9500	87	80	110	11
	24'7 1/4"	10000	91	84	115	11
HD-1200-30-80	26' - 2 15/16"	10500	95	87	122	11
(4500p/h)	27' - 10 5/8"	11000	99	90	130	11
(29' - 6 5/16"	11500	113	93	142	11
	31' - 2"	12000	117	97	152	7.5*2
	32' - 9 11/16"	12500	121	100	164	7.5*2
	21' - 3 7/8"	10000	88	76	109	11
	22' - 11 9/16"	10500	91	79	115	7.5*2
	24'7 1/4"	11000	94	86	120	7.5*2
HD-1200-30-100	26' - 2 15/16"	11500	98	89	125	7.5*2
(9000p/h)	27' - 10 5/8"	12000	104	94	132	7.5*2
	29' - 6 5/16"	12500	120	97	145	7.5*2
	31'-2"	13000	126	102	157	7.5*2
	32'-911/16"	13500	132	110	169	11*2



- Remarks:

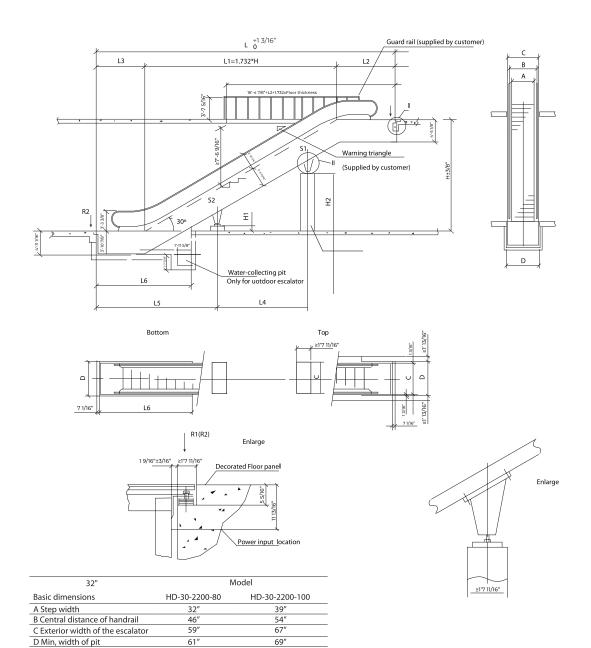
 1. When the escalator is double-drive, the up horizontal section of the escalator will be increased by 20"

 2. The maximum height of the escalator is 39' 4 7/16"

Escalator/Shaft Plan

Series 2200

Public Transport Heavy Duty



Angle of inclination (a=30°)

'3/4

13' - 6 15/16" 11' - 2 13/16"

12' - 3 3/16" 10' - 6 15/16'

20' - 4 1/8"

19' - 3/8"

2.7/2

12' - 5 3/16' 11' - 3/16"

11'- 1 7/16'

9'-87/16"

19' - 3/8"

17' - 8 5/8"

- **Remarks:**1. When the escalator is double-drive, the up horizontal section will be increased by 2' - 7 1/2"

 2. L4, IS. HI. H2. RI. R2. 51. 52 Will be provided by our company
- 3. The power of escalator will be provided by our company 4. The maximum designed height of the escalator is 72'

Rated Speed (V≤0.65m/s)

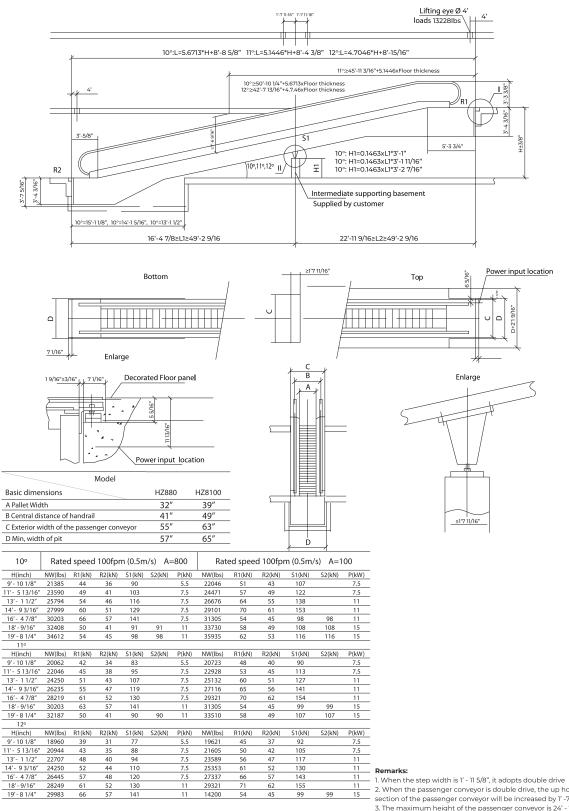
(inch)

L2 L3

L2

L3 L6

Passenger conveyor Shaft Plan



2. When the passenger conveyor is double drive, the up horizontal section of the passenger conveyor will be increased by 1' -7 11/16" 3. The maximum height of the passenger conveyor is 24' - 7 1/4" 4.52 is supporting force of the second middle supporting

Function

Standard Function

Item	Function	
1	Driving chain safety device	Stop escalator if the driving chain is broken or excessively elongated
2	Over speed detecting device	Detecting device of running speed, the escalator will stop when the running speedexceeds normal speed
3	Brake monitoring device	Detect if the brabe acts normally
4	Skirt panel safety device	Stop escalator if objects are caught detween step and skirt panel
5	Step roller safety device	Stop escalator if the step rollers are deformed or jacked
6	Step roller safety device	Stop escalator when the steps are broken
7	Comb plate safety device	Stop escalator if object are caught between comb plate and step
8	Handrail entry and exit safety device	Stop escalator when object are caught in the entry and exit of handrail
9	Step chain safety device	Stop escalator if the step chain is broken or elongated
10	Non-reversing safety device	stop escalator is its direction of travel is reversed
11	handrail antistatic devicce	Prevent static electricity which is generated by handrail
12	Motor overheat protection device	stop escalator if motor temperature is over the limit
13	Step missing detecting device	Stop escalator if the step is missing
14	Emergency stop switch	The swich is used when the emergenly stop is needed to the escalator
15	Green Cation light	Take care of the passengers for riding safety
16	Over load detection (Standard function)	Stop escalator if current is over in MCCB
17	Over flow sensor device (Outdoor standard function)	stop escalator if seeper is over default height in lower maintenance room

Optional Function

Item	Function	
1	Handrail broken safety device	Stop escalator if handrail breaks
2	Handrail speed detector	Stop escalator if handrail's speed is abnormal (optional function for indoor escalator, standard function for outdoor escalator)
3	safety brush of skirt panel	Prevent little matter drop into the clearance between skirt panel and step
4	Auto start	Realize the function of auto running and auto stop
5	Auxillary brake	Stop escalator when the running direction is chenged suddenly
6	Heating device for truss	When enviroment temperature is below, heating should be supplied for whole escalator truss
7	Heating device for comb plate (outdoor standard function)	When enviroment temperature is below, heating should be supplied for comb plates





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