

Your Challenge. Our Passion

# Escalator



**MoviLift** Elevator

[www.movilift.com](http://www.movilift.com)

Via Napoli, 348 80053

Castellammare di Stabia

Napoli

**-01 Description**

Escalator and Passenger Conveyor are designed and manufactured according to EN115(European standards) and GB16899-2011(Chinese Standards).

**-03 Material Option of Escalator**

Inner and Outer Decking, Skirting Panel / Colour of Handrail / Step / Comb / Landing Panel / Truss / Safety Functions Extended Board (PESSRAE) / Anti-Creeping Device / Skirting Brushes / Handrail Bracket / Balustrade Lighting / Skirting Lighting / Outside Cladding Decoration

**-09 Standard and Optional Functions**

**-11 Option Form for Escalator Specification**

**-12 Escalator Specifications & Parameters**

KYS/C230; KYS/C235; KYS/C330 Escalator Layout Drawing  
KYXF/KYH330; KYXF/KYH323; KYXF/KYH327 Heavy Duty Escalator layout Drawing;

**-18 Passenger Conveyor Specifications & Parameters**

KYPS12 / KYPF12 Passenger Conveyor Layout Drawing;  
KYPH0 Heavy Duty Passenger Conveyor Layout Drawing.



## > Description

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Movilift escalators and passenger conveyors, complying Europe latest EN115 & China GB16899-2011 standards, are adopted new materials and advanced technology to carry on its design and manufacture. They have operating smoothly, little noise and high reliability, high structure. They are durable and easy to maintain

Because of its superior design concept and advanced manufacturing process, escalator and passenger conveyor with exquisite structure, excellent step road, delicate lead way and elegant shape.

Movilift escalator and passenger conveyor has full range specifications, beautiful shape, flexible layout which are widely used in shopping malls, supermarkets, subways, airports, exhibition centers etc.

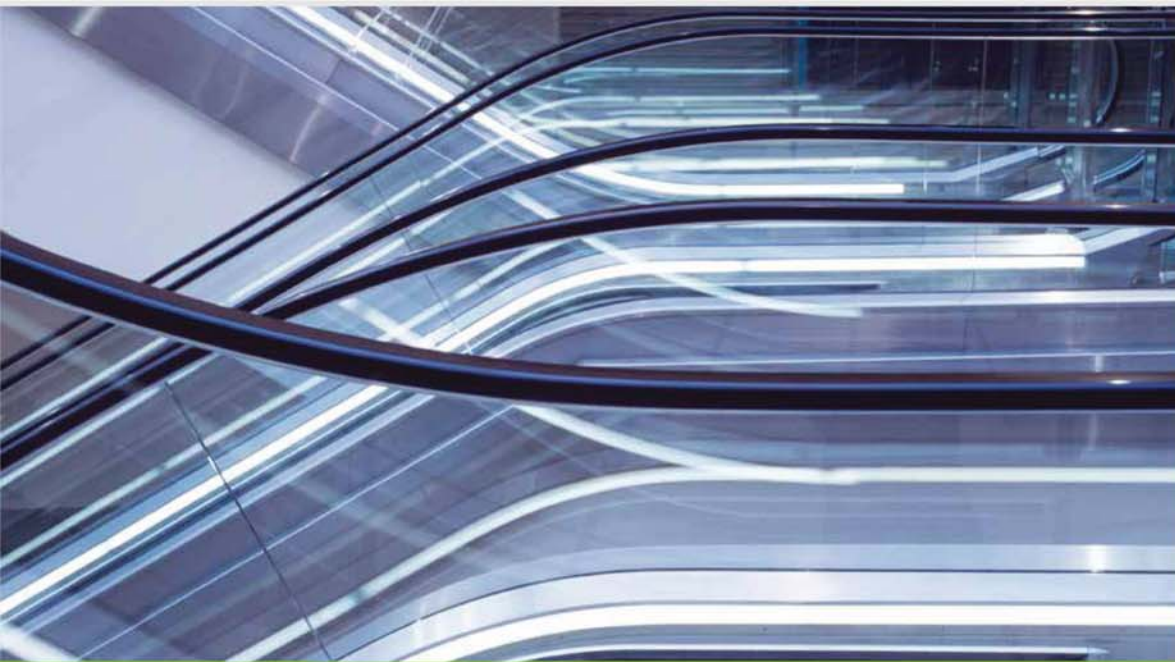


- **ISO9001:2008** • **ISO14001:2004**
- **OHSAS:18001:2007**

- > **European Certification**
- > **Russian Certification**
- > **Energy-Saving System**

Escalator  
Description

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> Escalator Material

> Handrail Color Option



Black



Red



Orange



Light brown



Shallow bluish green



Blue



Gray

> The Material of Inner and Outer Decking and Skirting

Comfort and Noble are the most light spot based on the stability and safet.



Hairline finished  
Stainless Steel



Hairline Teflon  
Finished  
Stainless Steel



Skirting with Hairline Stainless Steel



Skirting with the Hairline Teflon  
Finished Stainless Steel

> Step



Die-cast Aluminum step with  
yellow painted frame



Stainless Steel step with  
yellow plastic frame



Aluminum step with  
yellow plastic frame

## > Escalator Material

### > Comb



Aluminum

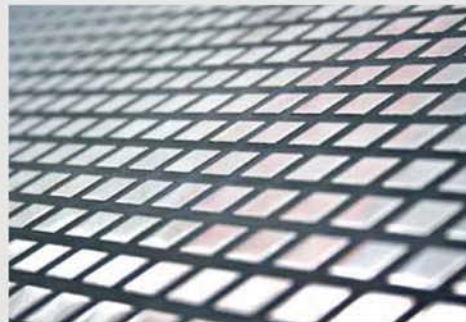


Resin

### > Landing Plate



Aluminum

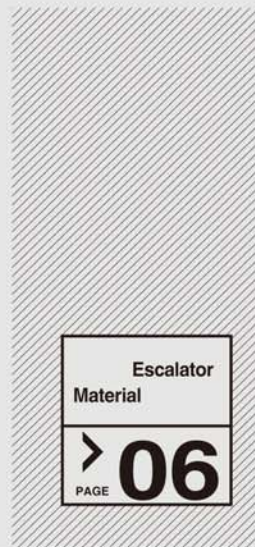


Punched Stainless Steel

### > The Material Option of Truss



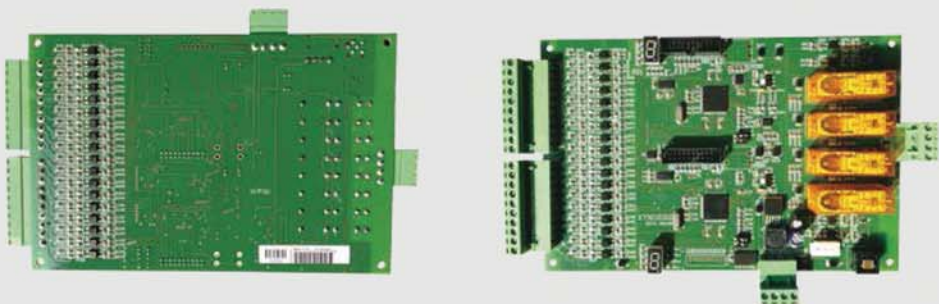
Truss/Painted Angle Steel



Truss/Hot-dip Galvanized

## > Escalator Material

### > Safety Functions Extended Board(PESSRAE)



### > Balustrade Lighting



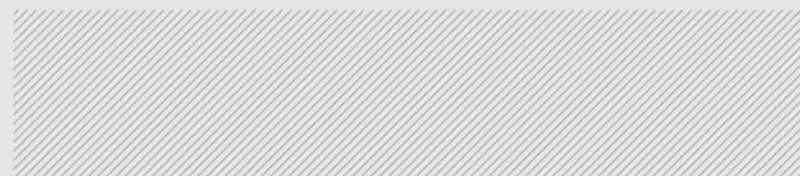
### > Skirting Lighting



### > Anti-Creeping Device



Escalator  
Material  
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### > Skirting Brush



Hairline Finished Stainless Steel

### > Handrail Bracket

### > The Material Option of Outside Cladding



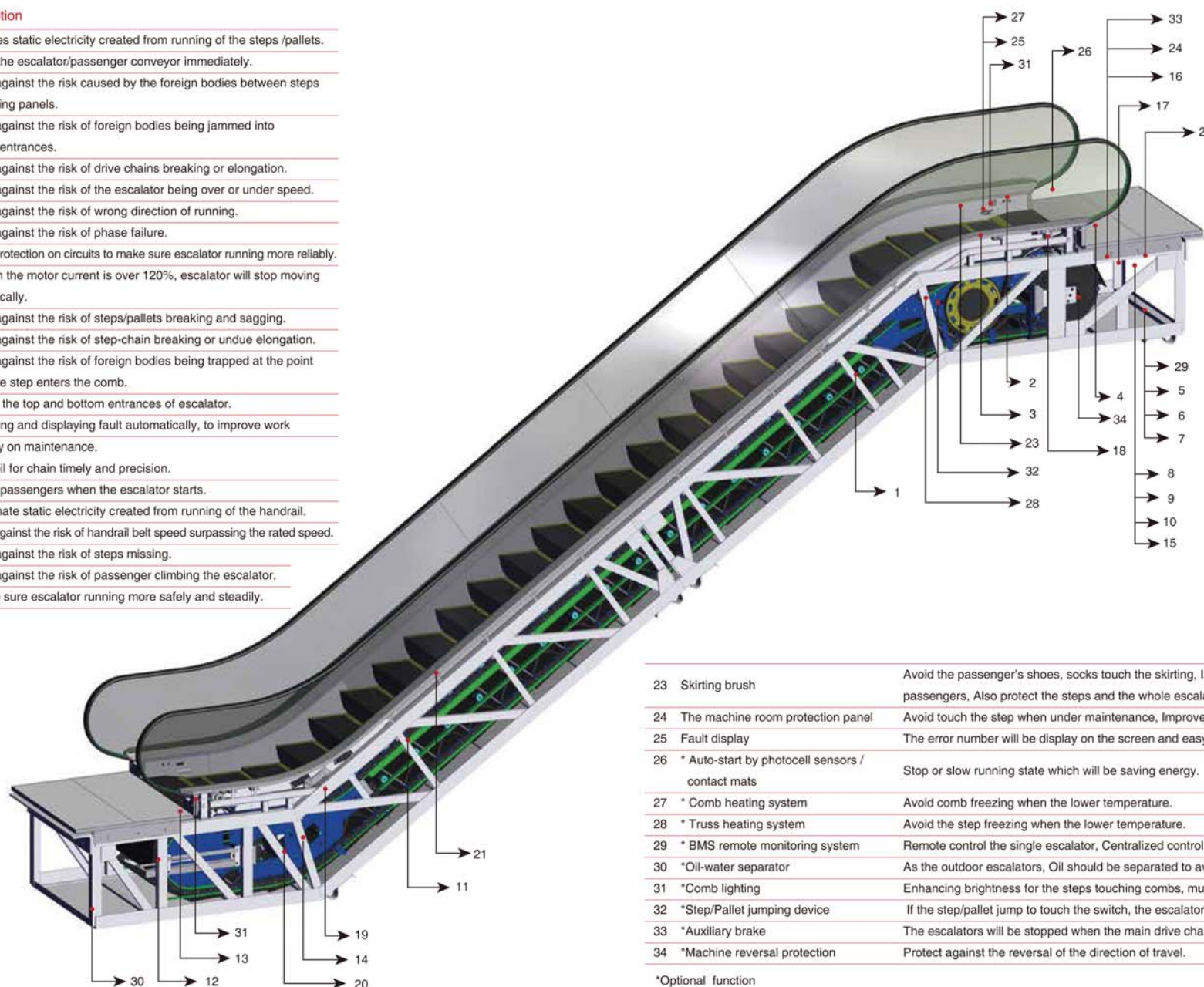
Glass



Glass

## Standard and Optional Function

No.	Safety Function	Description
1	Anti-static brush	Eliminates static electricity created from running of the steps /pallets.
2	Emergency stop button	To stop the escalator/passenger conveyor immediately.
3	Skirting protection	Protect against the risk caused by the foreign bodies between steps and skirting panels.
4	Handrail entrance protection	Protect against the risk of foreign bodies being jammed into handrail entrances.
5	Broken drive-chain protection	Protect against the risk of drive chains breaking or elongation.
6	Over/Under speed monitor	Protect against the risk of the escalator being over or under speed.
7	Anti-reversal protection	Protect against the risk of wrong direction of running.
8	Default phase protection	Protect against the risk of phase failure.
9	Electric circuit protection	Double protection on circuits to make sure escalator running more reliably.
10	Motor overload and overheat protection	Act when the motor current is over 120%, escalator will stop moving automatically.
11	Step/Pallet sagging protection	Protect against the risk of steps/pallets breaking and sagging.
12	Broken step-chain protection	Protect against the risk of step-chain breaking or undue elongation.
13	Comb protection	Protect against the risk of foreign bodies being trapped at the point where the step enters the comb.
14	Step gap illumination	To show the top and bottom entrances of escalator.
15	Fault display	Diagnosing and displaying fault automatically, to improve work efficiency on maintenance.
16	Auto Lubrication System	Supply oil for chain timely and precision.
17	Start alarm device	To warn passengers when the escalator starts.
18	Handrail anti-static protection	To eliminate static electricity created from running of the handrail.
19	Handrail belt speed monitor	Protect against the risk of handrail belt speed surpassing the rated speed.
20	Step missing protection	Protect against the risk of steps missing.
21	*Anti-creeping device	Protect against the risk of passenger climbing the escalator.
22	*PESSRAE system	To make sure escalator running more safely and steadily.



23	Skirting brush	Avoid the passenger's shoes, socks touch the skirting, Improve the safety of the passengers, Also protect the steps and the whole escalator normal operation.
24	The machine room protection panel	Avoid touch the step when under maintenance, Improve the safety of the passengers.
25	Fault display	The error number will be display on the screen and easy for maintenance.
26	* Auto-start by photocell sensors / contact mats	Stop or slow running state which will be saving energy.
27	* Comb heating system	Avoid comb freezing when the lower temperature.
28	* Truss heating system	Avoid the step freezing when the lower temperature.
29	* BMS remote monitoring system	Remote control the single escalator, Centralized control Multi-escalators.
30	*Oil-water separator	As the outdoor escalators, Oil should be separated to avoid pollute the environment.
31	*Comb lighting	Enhancing brightness for the steps touching combs, much safer.
32	*Step/Pallet jumping device	If the step/pallet jump to touch the switch, the escalator will be stopped.
33	*Auxiliary brake	The escalators will be stopped when the main drive chain broken or overspeed.
34	*Machine reversal protection	Protect against the reversal of the direction of travel.

\*Optional function





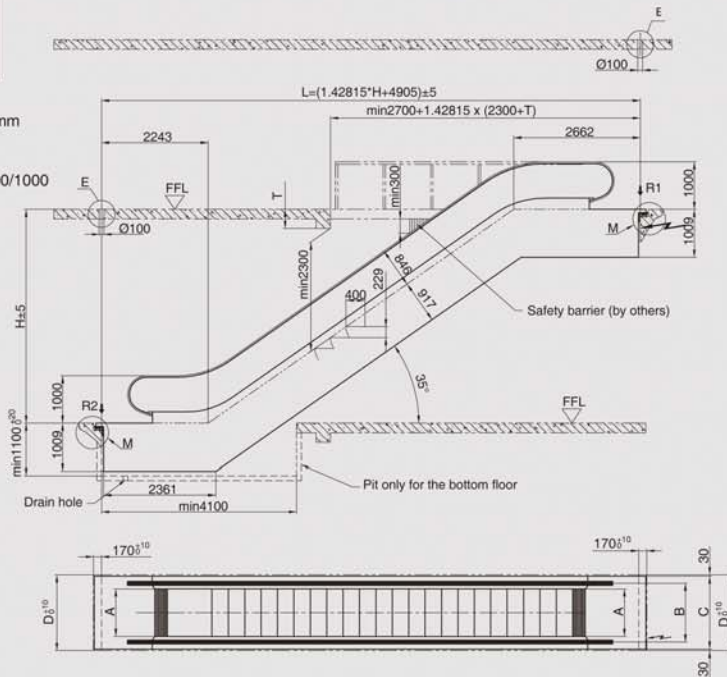
# Escalator Specifications & Parameters

Escalator Specifications & Parameters

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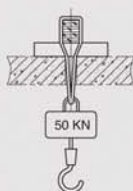
## KYS/C 235 Commercial/Slimline Escalator Layout Drawing

Vertical rise: Max. 6000mm  
 Inclination angle: 35°  
 Horizontal steps: 2  
 Step width (mm): 600/800/1000

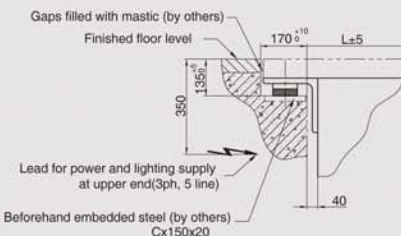


Step width	Vertical rise	Dead load	Reaction force	
			R1(KN)	R2(KN)
600	3000	54	43	39
	3500	57	46	41
	4000	60	49	44
	4500	64	52	46
	5000	67	54	49
	5500	70	57	51
800	6000	73	60	54
	3000	56	49	44
	3500	60	52	47
	4000	63	56	50
	4500	66	59	53
	5000	70	62	56
1000	5500	73	65	59
	6000	76	69	61
	3000	60	56	50
	3500	64	60	53
	4000	67	64	57
	4500	71	67	60
5000	74	71	64	
5500	82	77	69	
6000	85	81	72	

Detail E (by others)



Detail M



**Explanation:**

1. All dimensions in mm;
2. If add horizontal step, then horizontal span should be added correspondingly;
3. When the step width A=600mm, the truss must be extended by 420mm;
4. For outdoor type, pit depth should be 1450mm.

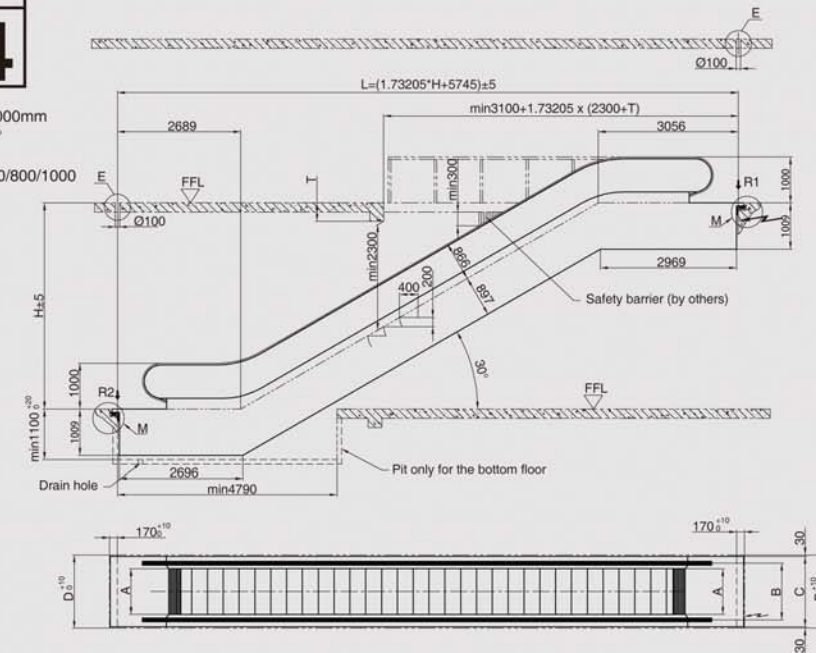
Type	KYS/C235-600	KYS/C235-800	KYS/C235-1000
A. Step width	600	800	1000
B. Handrail belt center width	838/910	1038/1110	1238/1310
C. Escalator width	1140/1200	1340/1400	1540/1600
D. Pit width	1200/1260	1400/1460	1600/1660

Escalator Specifications & Parameters

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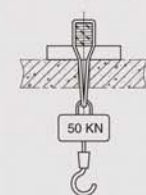
## KYS/C 330 Commercial/Slimline Escalator Layout Drawing

Vertical rise: Max. 8000mm  
 Inclination angle: 30°  
 Horizontal steps: 3  
 Step width (mm): 600/800/1000

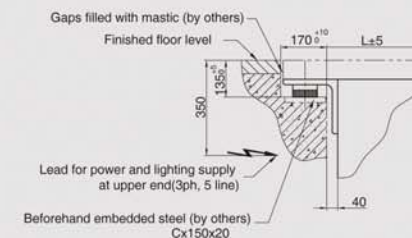


Step width	Vertical rise	Dead load	Reaction force	
			R1(KN)	R2(KN)
600	3000	58	48	42
	3500	61	51	45
	4000	65	54	48
	4500	68	57	51
	5000	72	60	54
	5500	75	63	57
800	6000	78	66	60
	3000	61	55	49
	3500	65	58	53
	4000	68	62	56
	4500	72	65	60
	5000	76	69	63
1000	5500	82	74	68
	6000	86	78	72
	3000	65	62	56
	3500	69	66	61
	4000	73	70	65
	4500	79	76	70
5000	83	80	74	
5500	90	87	79	
6000	94	91	83	

Detail E (by others)



Detail M



**Explanation:**

1. All dimensions in mm;
2. If add horizontal step, then horizontal span should be added correspondingly;
3. When the step width A=600mm, the truss must be extended by 420mm;
4. For outdoor type, pit depth should be 1450mm.

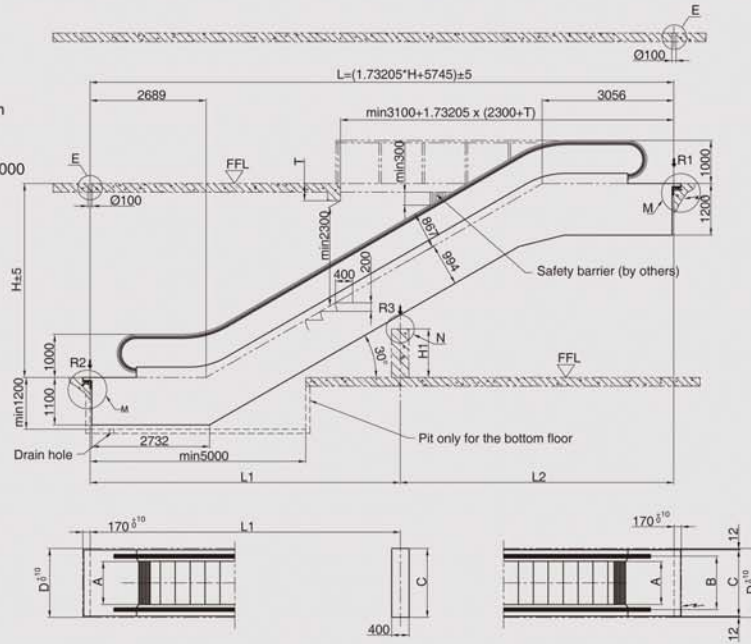
Type	KYS/C330-600	KYS/C330-800	KYS/C330-1000
A. Step width	600	800	1000
B. Handrail belt center width	838/910	1038/1110	1238/1310
C. Escalator width	1140/1200	1340/1400	1540/1600
D. Pit width	1200/1260	1400/1460	1600/1660

# Escalator Specifications & Parameters

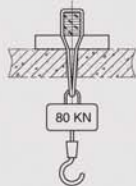
Escalator Specifications & Parameters  
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## KYXF/KYH 330 Heavy Duty Escalator layout Drawing

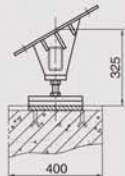
Vertical rise: Max. 15000mm  
 Inclination angle: 30°  
 Horizontal steps: 3  
 Step width (mm): 600/800/1000



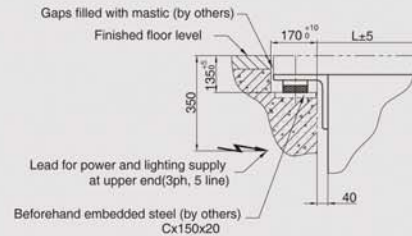
Detail E (by others)



Detail N



Detail M



Type	KYXF/KYH-330-600	KYXF/KYH-330-800	KYXF/KYH-330-1000
A. Step width	600	800	1000
B. Handrail belt center width	910	1110	1310
C. Escalator width	1200	1400	1600
D. Pit width	1260	1460	1660

Step width	600	800	1000
R1(KN)	4.1xL2+15.5	4.5xL2+16.1	5xL2+17.5
R2(KN)	4.1xL1+7.8	4.5xL1+7.8	5xL1+8.5
R3(KN)	4.25xL+9.5	4.5xL+10.5	5.2xL+11.5
Explanation	L, L1, L2 dimensions in M; L1, L2 is not more than 15m		

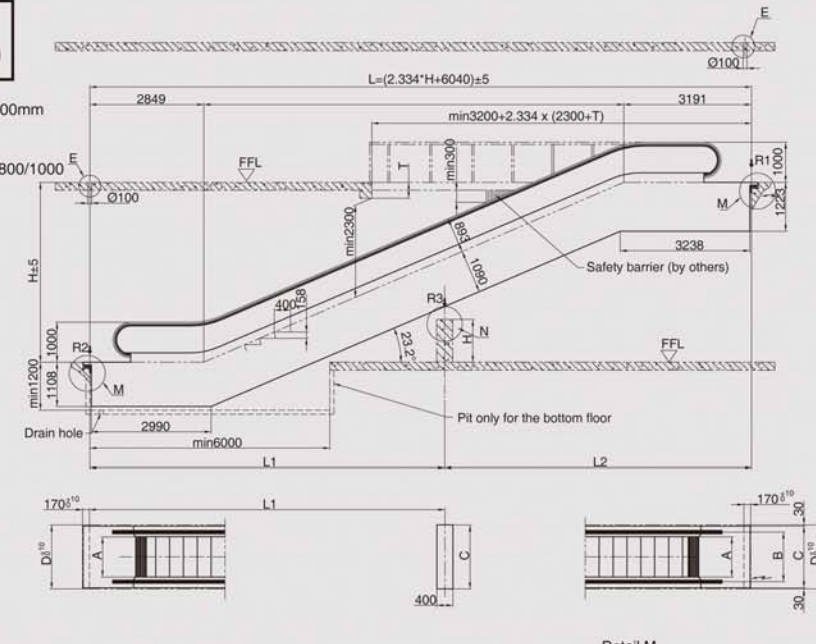
**Explanation:**

1. All dimensions in mm;
2. If add horizontal step, then horizontal span should be added correspondingly;
3. When the step width A=600mm, the truss must be extended by 420mm;
4. For outdoor type, pit depth should be 1500mm.

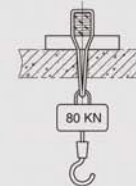
Escalator Specifications & Parameters  
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## KYXF/KYH 323 Heavy Duty Escalator layout Drawing

Vertical rise: Max. 15000mm  
 Inclination angle: 30°  
 Horizontal steps: 3  
 Step width (mm): 600/800/1000



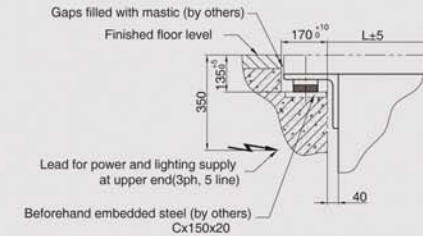
Detail E (by others)



Detail N



Detail M



Type	KYXF/KYH-323-600	KYXF/KYH-323-800	KYXF/KYH-323-1000
A. Step width	600	800	1000
B. Handrail belt center width	910	1110	1310
C. Escalator width	1200	1400	1600
D. Pit width	1260	1460	1660

Step width	600	800	1000
R1(KN)	4.1xL2+19.5	4.5xL2+20.1	5xL2+21.5
R2(KN)	4.1xL1+11.8	4.5xL1+11.8	5xL1+12.5
R3(KN)	4.25xL+13.5	4.5xL+15.5	5.2xL+15.5
Explanation	L, L1, L2 dimensions in M; L1, L2 is not more than 15m		

**Explanation:**

1. All dimensions in mm;
2. If add horizontal step, then horizontal span should be added correspondingly;
3. When the step width A=600mm, the truss must be extended by 420mm;
4. For outdoor type, pit depth should be 1500mm.

# Escalator Specifications & Parameters

# Passenger Conveyor Specifications & Parameters

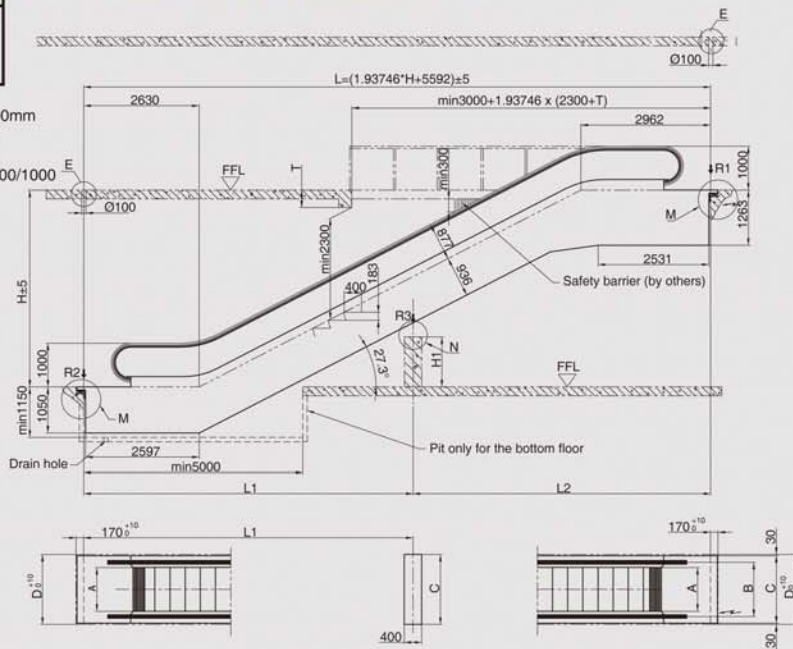
Passenger Conveyor Specifications & Parameters

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Escalator Specifications & Parameters  
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## KYXF/KYH327 Public Transport Escalator Layout Drawing

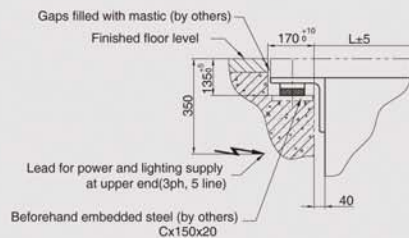
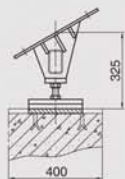
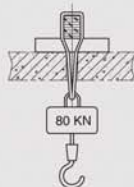
Vertical rise: Max. 15000mm  
Inclination angle: 27.3°  
Horizontal steps: 3  
Step width (mm): 600/800/1000



Detail E (by others)

Detail N

Detail M



Type	KYXF/KYH327-600	KYXF/KYH327-800	KYXF/KYH327-1000
A. Step width	600	800	1000
B. Handrail belt center width	910	1110	1310
C. Escalator width	1200	1400	1600
D. Pit width	1260	1460	1660

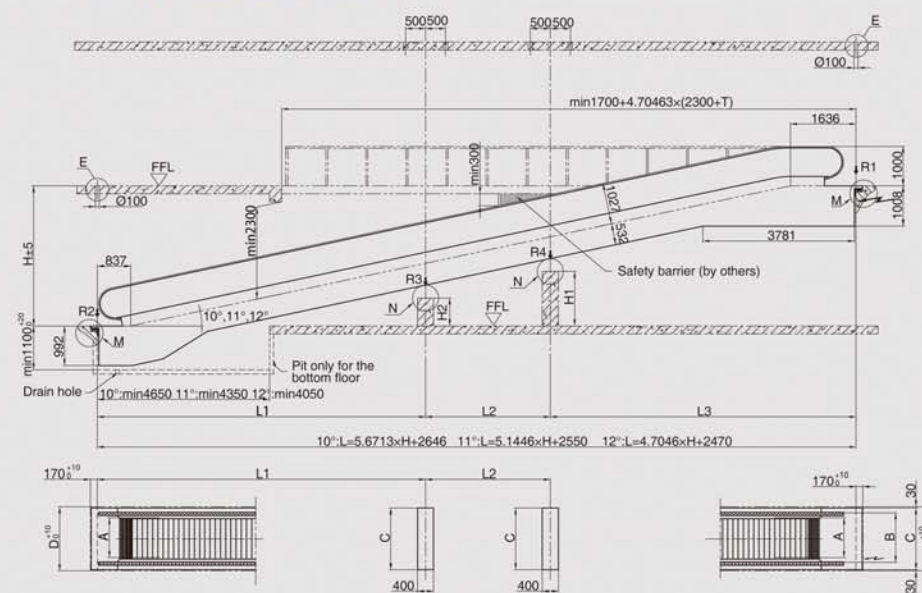
**Explanation:**

1. All dimensions in mm;
2. If add horizontal step, then horizontal span should be added correspondingly;
3. When the step width A=600mm, the truss must be extended by 420mm;
4. For outdoor type, pit depth should be 1500mm.

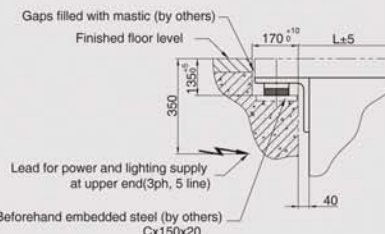
Step width	600	800	1000
R1(KN)	4.1xL2+17.5	4.5xL2+18.1	5xL2+19.5
R2(KN)	4.1xL1+9.8	4.5xL1+9.8	5xL1+10.5
R3(KN)	4.25xL+11.5	4.5xL+12.5	5.2xL+13.5
Explanation	L, L1, L2 dimensions in M; L1, L2 is not more than 15m		

## KYPS12 Commercial Passenger conveyor Layout Drawing

Vertical rise: Max. 8000mm  
Inclination angle: 10°/11°/12°  
Step width (mm): 800/1000

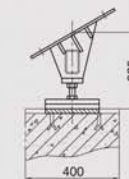
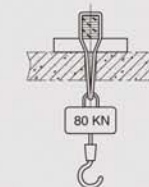


Detail M



Detail E (by others)

Detail N



Type	KYPS12-800	KYPS12-1000
A. Step width	800	1000
B. Handrail belt center width	1038	1238
C. Escalator width	1340	1540
D. Pit width	1400	1600

Reaction parameters	q	M	N
800	0.0039	9.5	4.5
1000	0.0045	11	5

Inclination angle	Vertical rise		Intermediate support	
	From	To	R3(KN)	R4(KN)
10°	1297	2178	-	-
	2179	4823	1	-
	4824	6000	1	1
	1449	2420	-	-
11°	2421	5335	1	-
	5336	6000	1	1
12°	1601	2663	-	-
	2664	5851	1	-
	5852	6000	1	1

No intermediate support (KN)	Reaction force	
	Single intermediate support (KN)	Double intermediate support (KN)
R1=Lxq+M	R1=L3xq+M	R1=L3xq+M
R2=Lxq+N	R2=L1xq+N	R2=L1xq+N
R3=(L1+L3)x1.3xq	R3=(L1+L2)x1.3xq	R3=(L1+L2)x1.3xq
R4=(L3+L2)x1.3xq		
Note	L1, L2, L3 not exceed 15m	

- Explanation:**
1. All dimensions in mm;
  2. For outdoor type, pit depth should be 1450mm.

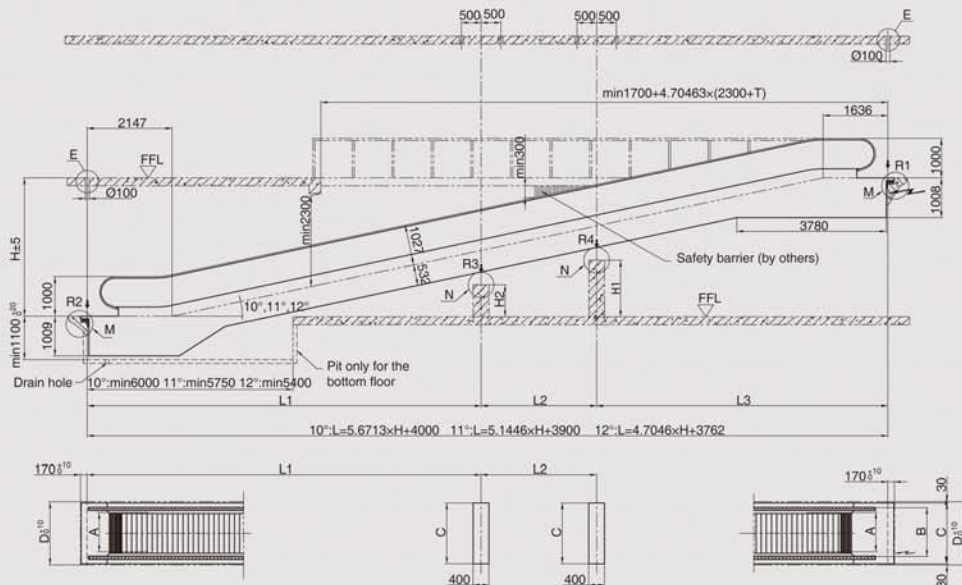
# Passenger Conveyor Specifications & Parameters

Passenger Conveyor Specifications & Parameters

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## KYPF12 Commercial Passenger Conveyor Layout Drawing

Vertical rise: Max. 8000mm  
Inclination angle: 10°/11°/12°  
Step width (mm): 800/1000

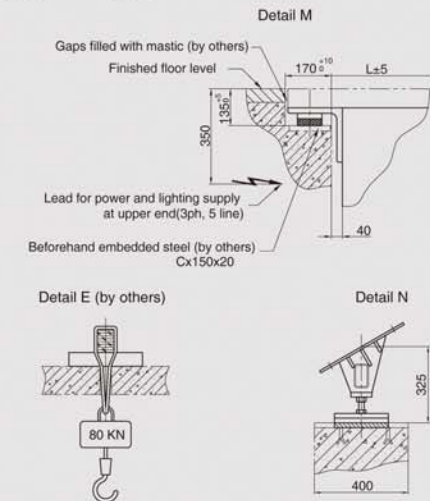


Type	KYPF12-800	KYPF12-1000
A. Step width	800	1000
B. Handrail belt center width	1038	1238
C. Escalator width	1340	1540
D. Pit width	1400	1600

Reaction parameters	q	M	N
800	0.0039	9.5	4.5
1000	0.0045	11	5

Inclination angle	Vertical rise		Intermediate support	
	From	To	R3(KN)	R4(KN)
10°	1263	1792	-	-
	1793	4437	1	-
	4438	6000	1	1
11°	1393	1975	-	-
	1976	4891	1	-
	4892	6000	1	1
12°	1523	2160	-	-
	2161	5349	1	-
	5350	6000	1	1

Reaction force		
No intermediate support (KN)	Single intermediate support (KN)	Double intermediate support (KN)
R1=Lxq+M	R1=L3xq+M	R1=L3xq+M
	R2=L1xq+N	R2=L1xq+N
R2=Lxq+N	R3=(L1+L2)x1.3xq	R3=(L1+L2)x1.3xq
	R4=(L3+L2)x1.3xq	R4=(L3+L2)x1.3xq
Note	L1, L2, L3 not exceed 15m	



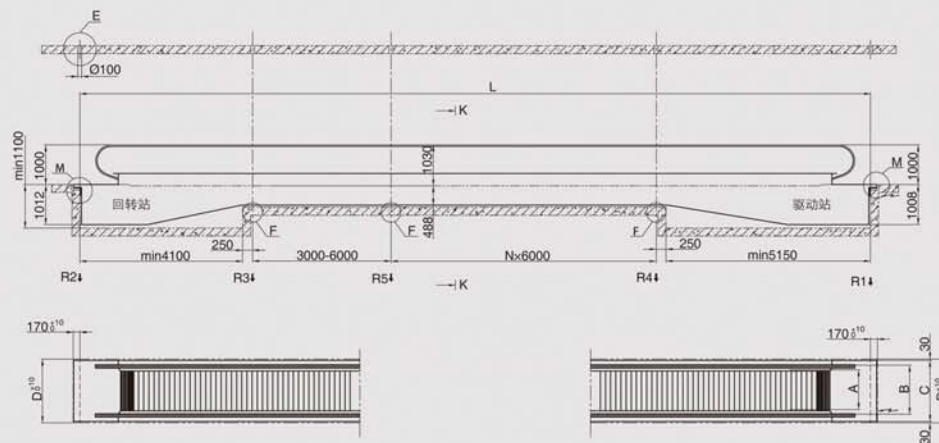
Explanation:  
1. All dimensions in mm;  
2. For outdoor type, pit depth should be 1450mm.

Passenger Conveyor Specifications & Parameters

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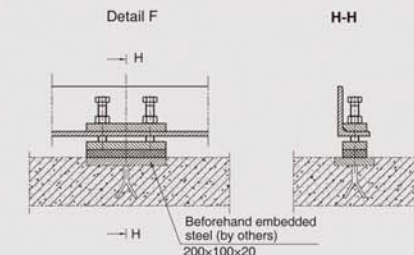
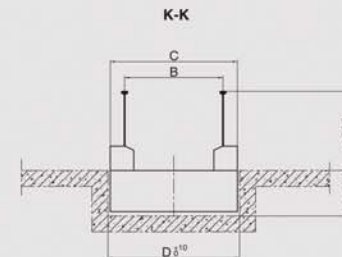
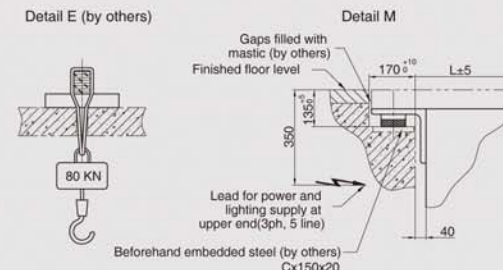
## KYPH0 Public Transport Passenger Conveyor Layout Drawing

Horizontal span: Max. 200  
Inclination angle: 0°  
Step width (mm): 800/1000



Type	KYPH0-800	KYPH0-1000
A. Step width	800	1000
B. Handrail belt center width	1038	1238
C. Escalator width	1340	1540
D. Pit width	1400	1600

Reaction force	800	1000
R1	45KN	49KN
R2	31KN	33KN
R3	30KN	32KN
R4	32KN	34KN
R5	44KN	53KN



Explanation:  
1. All dimensions in mm;  
2. For outdoor type, pit depth should be 1450mm.