



**TOSHIBA**

Toshiba Standard Type  
ARE series

# Moving Walk

## Safety Cautions

- Observance of relevant laws / regulations are required.
- Read the entire "Instruction Manual" carefully before use, for important information about safety, handling and operation.

**TOSHIBA**

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Please enter the contents from the "Inquiry Input Form" in website.  
<https://www.toshiba-elevator.co.jp/elv/infoeng/>

• The data given in this catalog are subject to change without notice.

\* Revised publication effective Jun. 2023

GK-F220(0)-2306-2000-2306(TD)

# Moving Walk

## ARE series

Adheres to standard global quality of Toshiba.

Adopts the people-centered design concept to meet diversified requirements.

Applies the perfect and attentive maintenance service system to ensure safe use



## SAFETY & COMFORT

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### **Toshiba always gives top priority to safety and security**

Toshiba will continue to be a trusted brand by providing products and services that satisfy our customers, placing top priority on safe and secure use.

## ENERGY SAVING

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### **Variable frequency control**

- Both the Low Speed Standby Operation Mode and Low Speed Stop Standby Operation Mode are optional.
- It applies the bypass variable frequency technology, with high efficiency and energy conservation.

### **LED lighting system**

- It adopts the full LED lighting system, with comfortable brightness and low energy consumption.

## TECHNOLOGY

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**High performance 32-bit microprocessor**

**Dedicated truss structure and mold material**

## ENVIRONMENTAL PROTECTION

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**Higher than corresponding standards of the Restriction of Hazardous Substances (RoHS) and abolishes the use of specific chemicals**

Higher than RoHS requirements, reduces the use of specific chemicals, and all the main substrates adopt environmentally friendly technologies.

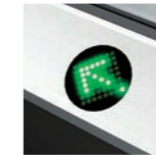
**Toshiba Technology - EMC Compliant**



## Function of Safety and comfortable

### Driving Monitor "ESNAVI" Optional

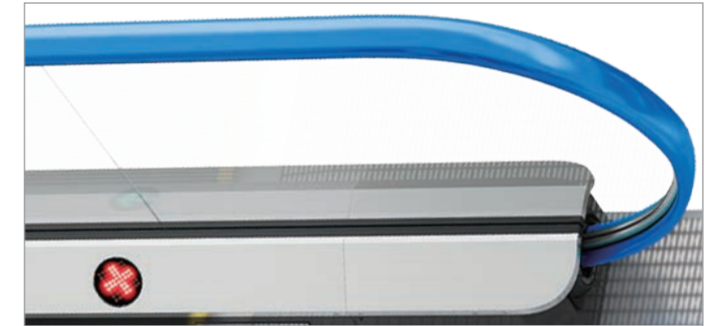
"Operating direction" and "No entry" symbols displayed on the Moving walk's skirt-deck, operating direction to the passengers.



Operating direction



No entry

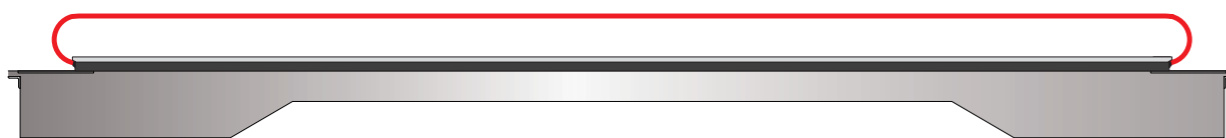


### Information about the activation of safety device Standard

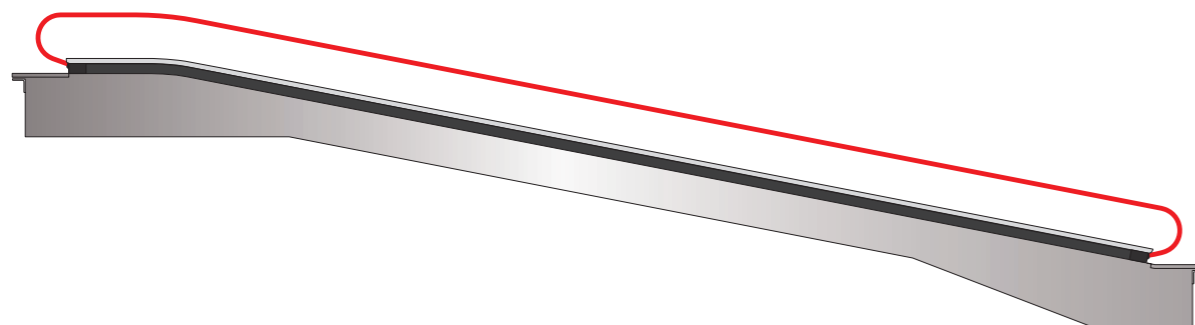
"This device will indicate which safety device has activated and stooed the operation."



### ► Flat type Moving Walk (Horizontal type)



### ► Slope type Moving Walk (Inclination type)



### Inlet Brush Standard

By installing a brush type guard at the entrance of the handrai belt, it prevents children's hands getting trapped into.



### Handrail

Selected the most suitable color from eight available color variations to match the building use and design concepts.

Optional

Black color

Standard

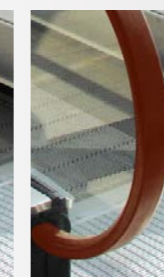
Other seven color



Black



Gray



Brown



Blue



Red



Oreng



Green



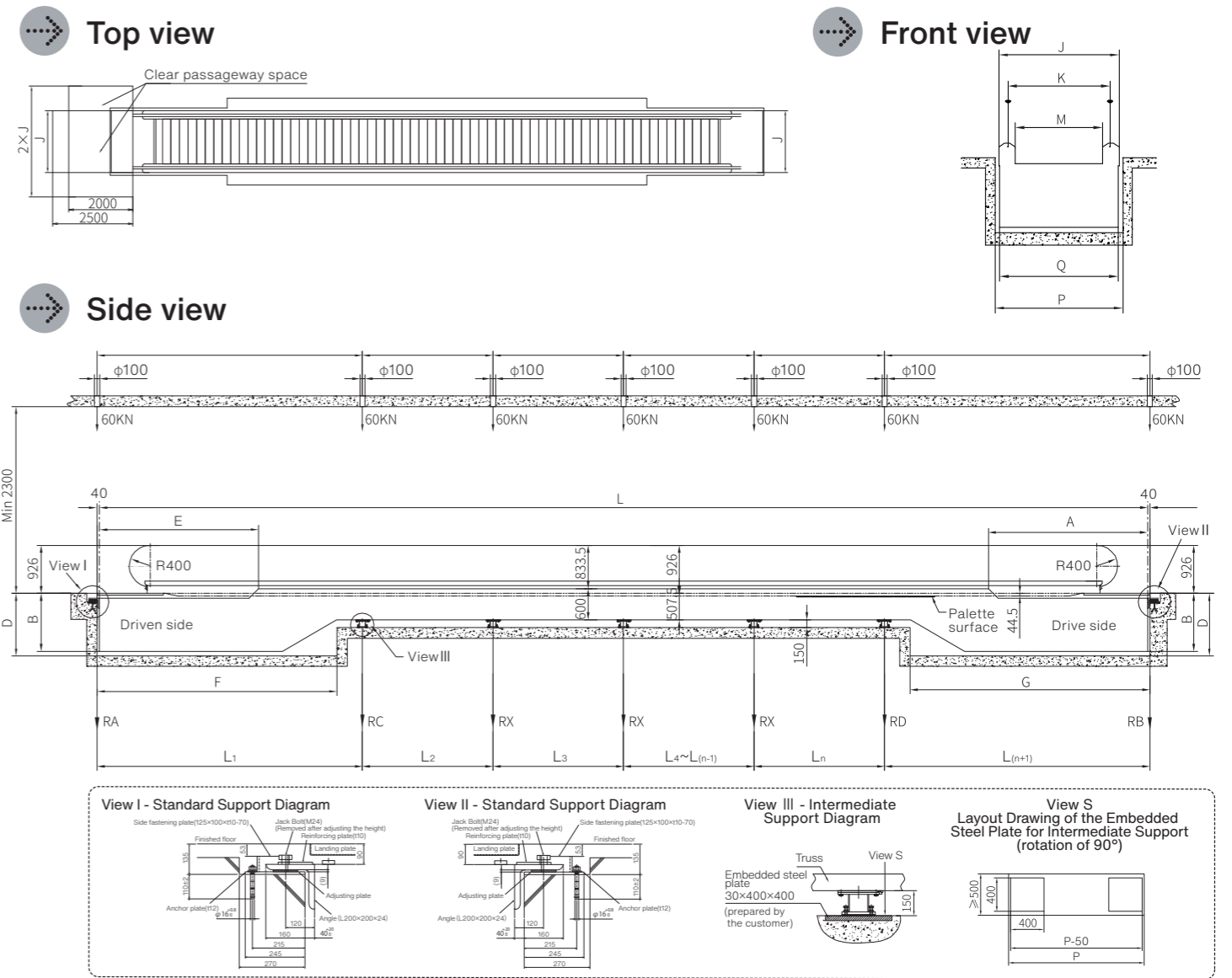
Beige

## ► Function & Specifications

● Standard ○ Optional ✕ Not applicable

Classification	Content	Application (Regulation code)		
		GB, COP, SS626	EN115	
Control mode	Single speed	●	●	
	Variable frequency and low speed standby	○	○	
	Variable frequency and low speed stop standby	○	○	
	Single speed stop standby	○	○	
Handrail color	Black	●	●	
	* Red, green, gray, brown, blue, orange	○	○	
Handrail guide plate	Stainless steel	●	●	
Side plate	Transparent reinforced glass (vertical motion path of joints)	●	●	
Inner cover plate	Stainless steel	●	●	
Outer cover plate	Stainless steel	●	●	
Landing plate material	Stainless steel 304 (Groove without painting)	●	●	
	S1000 Stainless steel 430, 316 (Groove without painting)	○	○	
	Stainless steel 430, 316 (Groove with black color painting)	○	○	
	S1400 Stainless steel 304 (Groove with black color painting)	●	●	
Toshiba logo on the landing plate	Stainless steel 430, 316 (Groove with black color painting)	○	○	
	Yes	●	●	
Floor sign	Yes	○	○	
Comb plate	Aluminum alloy (natural color)	●	●	
Skirt panel	Stainless steel	●	●	
Style	Normal type	S1400 Aluminum alloy die-cast (Have Polished surface) Black color paint Demarcation line: Two sides (Color: Yellow)	●	●
		Stainless steel 430 Black color painted Demarcation line: Two sides (Color: Yellow)	●	✕
		S1000 Aluminum alloy die-cast (No Polished surface) Gray color paint Demarcation line: Two sides (Color: Yellow)	○	✕
		Stainless steel 430 Black color painted Demarcation line: Two sides (Color: Yellow)	○	✕
Palette material	Public transport type	S1400 Aluminum alloy die-cast (Have Polished surface) Black color paint Demarcation line: Two sides (Color: Yellow)	●	●
		S1000 Aluminum alloy die-cast (Have Polished surface) Gray color paint Demarcation line: Two sides (Color: Yellow)	●	●
Moving direction	Reversible up and down operation	●	●	
Lighting	Balustrade lighting: White, Warm white, Blue, (The balustrade lighting can apply to scope $\leq 38.65m$ , review is required when the scope is exceeded)	○	○	
	Comb plate lighting: white, blue	○	○	
	Skirt panel lighting: white, warm white, blue (banded)/white, blue (spotty)	○	○	
	Lighting under the palette: green	○	○	
Function	Moving direction indicator	Yes	○	
	Fault indicator	Yes	●	
	Automatic operation function	Yes	○	
	Automatic oiling device	Yes	●	
Speed	Monitoring panel*	Yes	○	
	Rated speed	30m/min 39m/min 45m/min 39-30m/min (Note) 45-39m/min (Note) ※Note: Two speed changing (39-30m/min or 45-39m/min) is applicable only to Full time inverter operation.	●	○
Safety Device	Handrail inlet protection	Yes	●	
	Inlet brush	Yes	●	
	Palette sagging detection	Yes	●	
	Overload protection of the driving device	Yes	●	
	Palette chain protection	Yes	●	
	Safety protection of the comb plate	Yes	●	
	Non-operated reversal protection	Yes	●	
	Thermal protection of the motor	Yes	●	
	Over-speed protection	Yes	●	
	Phase error protection	Yes	●	
	Missing palette monitoring	Yes	●	
	Missing landing plate detection	Yes	●	
	Brake release monitoring	Yes	●	
	Braking distance monitoring	Yes	●	
	Handrail speed monitoring	Yes	●	
	Electrostatic protection of the handrail	Yes	●	
Electrostatic protection of the palette	Yes	●		
Anti-pinch device on the skirt panel (brush)	Yes	○		
Others	Connection point of the monitoring panel	Yes	○	
	Full monitoring of the safety loop	Yes	○	
	Automatic voice broadcast	Yes	○	
	Seismometer interface	Yes	○	
	Exterior decoration weight	Below 12kg/m	●	

## ► Installation design plan



Dim code	Form	S1000		S1400		Rated speed					
		S1000	S1400	S1000	S1400	30m/min		39m/min, 45m/min		39-30m/min, 45-39m/min	
J		1530	1930			Regulation: GB, COP, EN115, SS626		GB, COP, EN115, SS626		GB, COP, EN115, SS626	
K		1237	1637			Motor capacity: 7.5kW, 9.5kW, 11kW		7.5kW, 9.5kW, 11kW			
M		1002	1400			Driving system: Line starting Part time inverter operation				Full time inverter operation	
Q		1500	1900			L: 15000 ≤ L ≤ 60000				3257	
P		1650	2050			A: 2957		3057		4600	
						B: 992		1112		4600	
						D: 1097		1217		4600	
						E: 2957		3057		4600	
						F: 4500		4600		4800	
						G: 4500		4600		4800	

Dim code	Form	S1000 type			S1400 type		
		Intermediate support quantity			Intermediate support quantity		
		1	2	3-7	1	2	3-7
RA		4.6L <sub>1</sub> +4000			5.6L <sub>1</sub> +4000		
RC		4.3L <sub>1</sub> +4L <sub>2</sub> +20000	4.3L <sub>1</sub> +4.4L <sub>2</sub> +12000		5.3L <sub>1</sub> +5L <sub>2</sub> +22000	5.3L <sub>1</sub> +5.4L <sub>2</sub> +14000	
RX				4.4(L <sub>n</sub> +L <sub>(n+1)</sub> )+10000			5.4(L <sub>n</sub> +L <sub>(n+1)</sub> )+12000
RD			4.4L <sub>2</sub> +4L <sub>3</sub> +18000	4.4L <sub>n</sub> +4L <sub>(n+1)</sub> +18000		5.4L <sub>2</sub> +5L <sub>3</sub> +20000	5.4L <sub>n</sub> +5L <sub>(n+1)</sub> +20000
RB		5L <sub>2</sub> +14000	5L <sub>3</sub> +14000	5L <sub>(n+1)</sub> +14000	6L <sub>2</sub> +14000	6L <sub>3</sub> +14000	6L <sub>(n+1)</sub> +14000

Note: ① Units of L<sub>1</sub> to L<sub>(n+1)</sub> are (mm); ② "n" indicates the number of intermediate supports. When the distance between force bearing beams is greater than 10m:(Regulation code "COP": 8m), additional intermediate support beams shall be added.

※This page posted the contents of table and data complies with "GB standards".

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## ► Function & Specifications

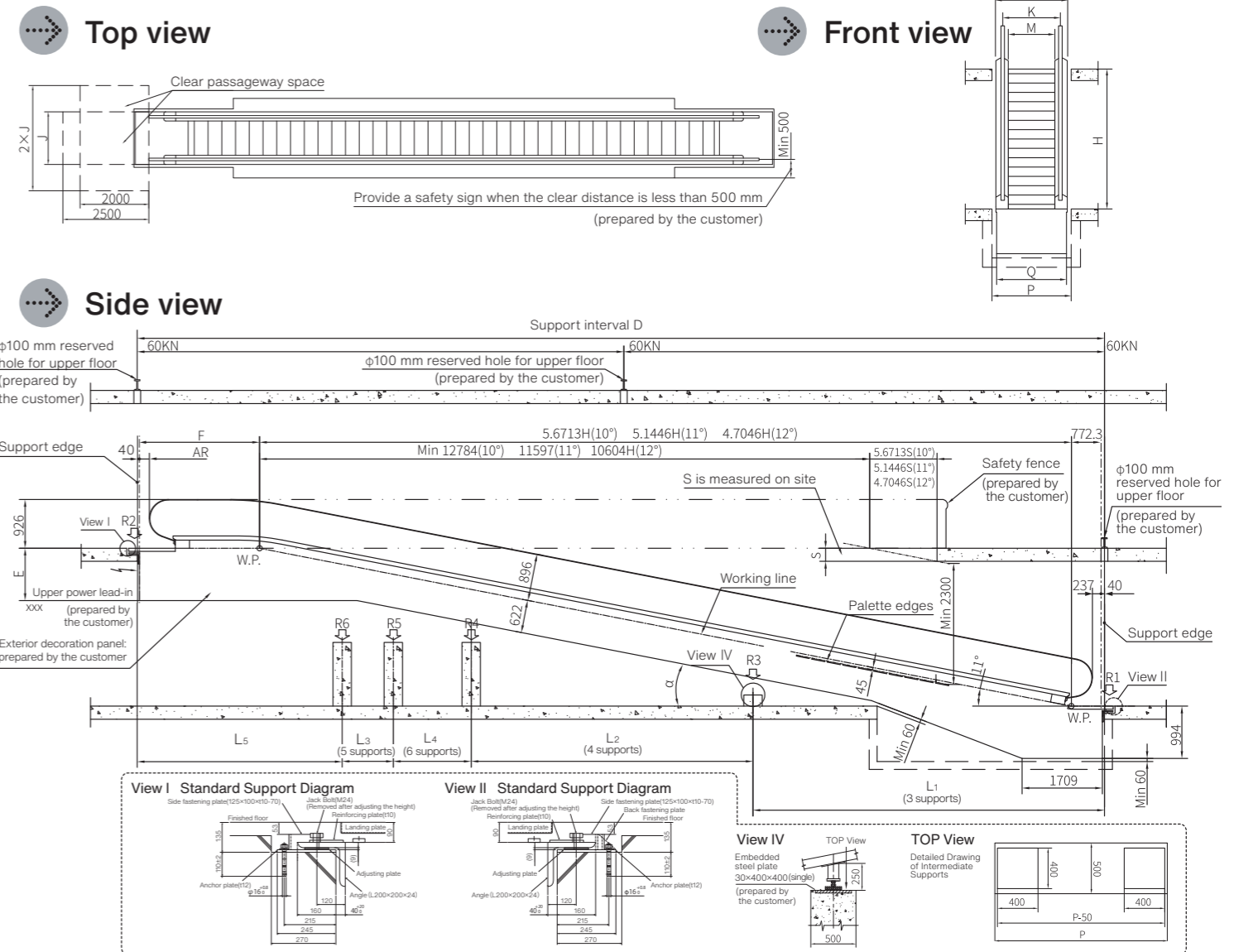
● Standard ○ Optional

Classification	Content	Application ※Note1	
Style	Control mode	Single speed ● Variable frequency and low speed standby ○ Variable frequency and low speed stop standby ○ Single speed stop standby ○	
	Handrail color	Black ● * Red, green, gray, brown, blue, orange ○	
	Handrail guide plate	Stainless steel ●	
	Side plate	Transparent reinforced glass (vertical motion path of joints) ●	
	Inner cover plate	Stainless steel ●	
	Outer cover plate	Stainless steel ●	
	Landing plate material	Surface impact molding of stainless steel (no coating) ●	
	Toshiba logo on the landing plate	Yes ●	
	Floor sign	Yes ○	
	Comb plate	Aluminum alloy (natural color) ●	
Function	Skirt panel	Stainless steel ●	
	Palette material	Stainless steel (SUS430) ● Aluminum alloy die-cast ○	
	Palette appearance	Stainless Steel: Black color paint, Demarcation line: Two sides (Color: Yellow) ● Aluminum alloy die-cast: Gray color paint, Demarcation line: Two sides (Color: Yellow) ○	
	Moving direction	Reversible up and down operation ●	
	Lighting	Balustrade lighting : White, Warm white, Blue, (The balustrade lighting can apply to scope :10°H≤6.34m, 11°H≤6.97m, 12°H≤7.59m, review is required when the scope is exceeded)	○
		Comb plate lighting: white, blue	○
		Skirt panel lighting: white, warm white, blue (banded)/white, blue (spotty)	○
		Lighting under the palette: green	○
	Safety Device	Moving direction indicator	Yes ○
		Fault indicator	Yes ●
Automatic operation function		Yes ○	
Automatic oiling device		Yes ●	
Monitoring panel*		Yes ○	
Others		Rated speed	30m/min ●
		Handrail inlet protection	Yes ●
		Inlet brush	Yes ●
		Palette sagging detection	Yes ●
		Overload protection of the driving device	Yes ●
	Palette chain protection	Yes ●	
	Safety protection of the comb plate	Yes ●	
	Non-operated reversal protection	Yes ●	
	Thermal protection of the motor	Yes ●	
	Over-speed protection	Yes ●	
Others	Phase error protection	Yes ●	
	Missing palette monitoring	Yes ●	
	Missing landing plate detection	Yes ●	
	Brake release monitoring	Yes ●	
	Braking distance monitoring	Yes ●	
	Handrail speed monitoring	Yes ●	
	Electrostatic protection of the handrail	Yes ●	
	Electrostatic protection of the palette	Yes ●	
	Ratchet device (below 6 m)	Yes ●	
	Additional brake (above 6 m)	Yes ●	
Others	Anti-creeping device (optional configuration according to the actual on-site situation)	Yes ○	
	Anti-pinch device on the skirt panel (brush)	Yes ○	
	Connection point of the monitoring panel	Yes ○	
	Full monitoring of the safety loop	Yes ○	
	Automatic voice broadcast	Yes ○	
Others	Seismometer interface	Yes ○	
	Exterior decoration weight	Below 12kg/m <sup>2</sup> ●	

\* The delivery cycle for this function may be extensive. Please consult local sales personnel for the specific delivery time.

※Note1; Complies with "GB standards".

## ► Installation design plan



Unit: mm				Unit: mm				
Dim code	Form	S1000	S800	Dim code	Type	S1000	S800	
J		1530	1330	H	10°	H≤5000	5000<H≤7900	
					11°	H≤5100	5100<H≤8100	
					12°	H≤5200	5200<H≤8300	
K		1237	1037	D	10°	5.6713H+812.3+2324.8	5.6713H+812.3+2504.8	
					11°	5.1446H+812.3+2324.8	5.1446H+812.3+2504.8	
					12°	4.7046H+812.3+2324.8	4.7046H+812.3+2504.8	
M		1007	805	P	10°	4700		
					11°	4500		
					12°	4500		
Q		1500	1300	F	2284.8		2464.8	
					AR	253.3		433.3
						994		1114
P		1650	1450	E	994		1114	

Dim code	Form	S1000 type				S800 type			
		Intermediate support quantity							
		1	2	3	4	1	2	3	4
R1		2.4L <sub>1</sub> +34000				2.4L <sub>1</sub> +32000			
R2		3L <sub>5</sub> +44000				3L <sub>5</sub> +42000			
R3	4.8(L <sub>1</sub> +L <sub>5</sub> )	4.8L <sub>1</sub> +3L <sub>2</sub> +24000				4.8(L <sub>1</sub> +L <sub>5</sub> )-2000	4.8L <sub>1</sub> +3L <sub>2</sub> +20000		
R4		3L <sub>2</sub> +4.8L <sub>5</sub> +20000	3(L <sub>2</sub> +L <sub>3</sub> )+44000				3L <sub>2</sub> +4.8L <sub>5</sub> +18000	3(L <sub>2</sub> +L <sub>3</sub> )+40000	
R5			3L <sub>3</sub> +4.8L <sub>5</sub> +20000	3(L <sub>3</sub> +L <sub>4</sub> )+44000			3L <sub>3</sub> +4.8L <sub>5</sub> +18000	3(L <sub>3</sub> +L <sub>4</sub> )+40000	
R6			3L <sub>4</sub> +4.8L <sub>5</sub> +20000					3L <sub>4</sub> +4.8L <sub>5</sub> +18000	

Note: When the distance between force bearing beams is greater than 11m, additional intermediate support beams shall be added.



### Precautions for using a cart on the moving walk (customer's responsibility)

● Before using a cart on the moving walk, the user needs to confirm the following matters first

1. The cart to be used shall be equipped with a brake device or other device that could replace it.
2. The wheel of the cart to be used shall fit the palette groove size of the moving walk. Please refer to the following figure for the alignment relationship (Figure 2.2 and 3.2).

Note: If the wheel does not fit the palette groove, there may be a risk that the brake device of the cart could not be released at the exit of the moving walk, and it will prevent the cart from moving smoothly to the comb plate.

3. Confirm the type of cart, and the user shall confirm the following matters before using the cart.
  - Types of cart to be used: shopping cart, luggage cart, etc. (Carts shall comply with EN1929-2 and EN1929-4)
  - Fixation modes of the cart: brake type, fixed roller type, others.
  - The cart width shall be at least 400 mm smaller than the palette width.
  - The maximum load capacity of the cart shall be  $\leq 50$  kg.
  - The cart wheel diameter shall be  $\geq 125$  mm.

● Examples of cart wheels holding the brake stationary on the moving walk palette

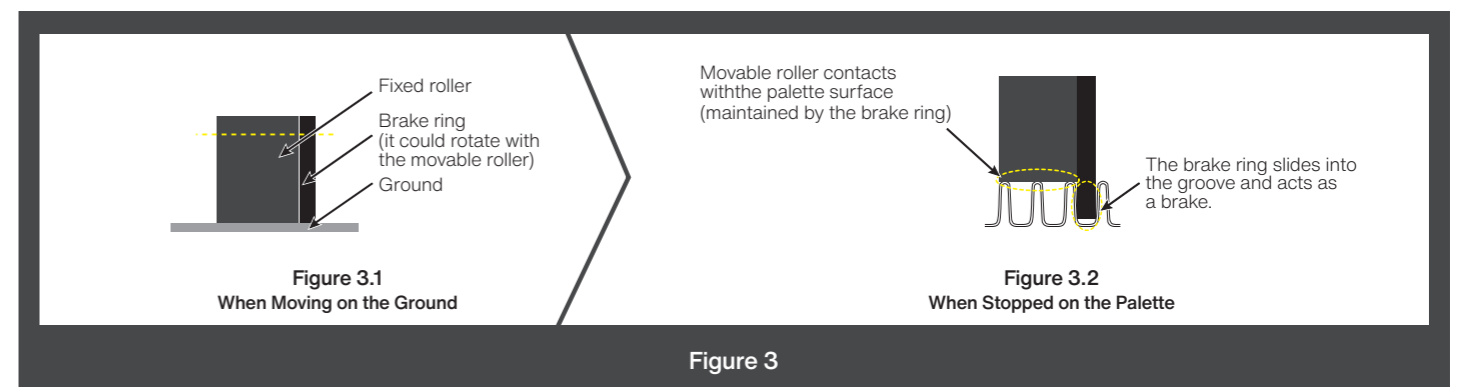
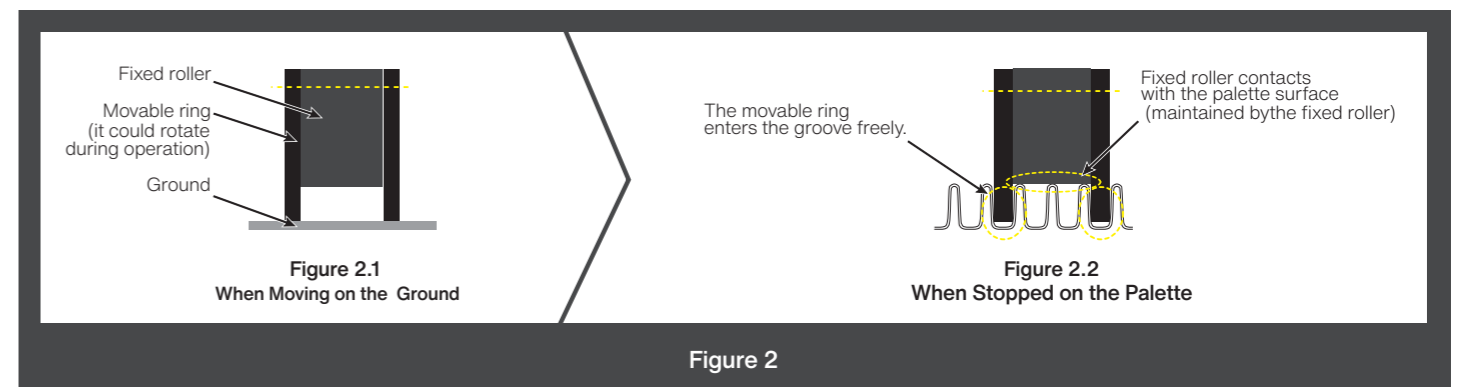
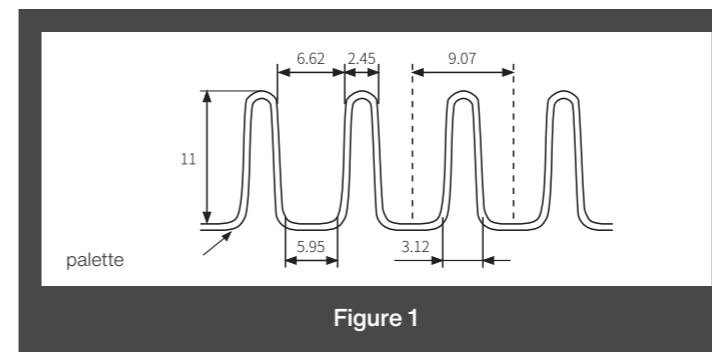
1. The cart type without the brake device is shown in Figure 2.
2. The cart type with the brake device is shown in Figure 3.

Note: No matter which type of cart is used, the movable ring (brake ring) must be able to enter the palette groove easily. It is the alignment relationship between the movable ring (brake ring) and the palette groove that keeps the cart in stopped mode. Therefore, the user needs to confirm the relationship between the palette groove size and the cart wheel size.

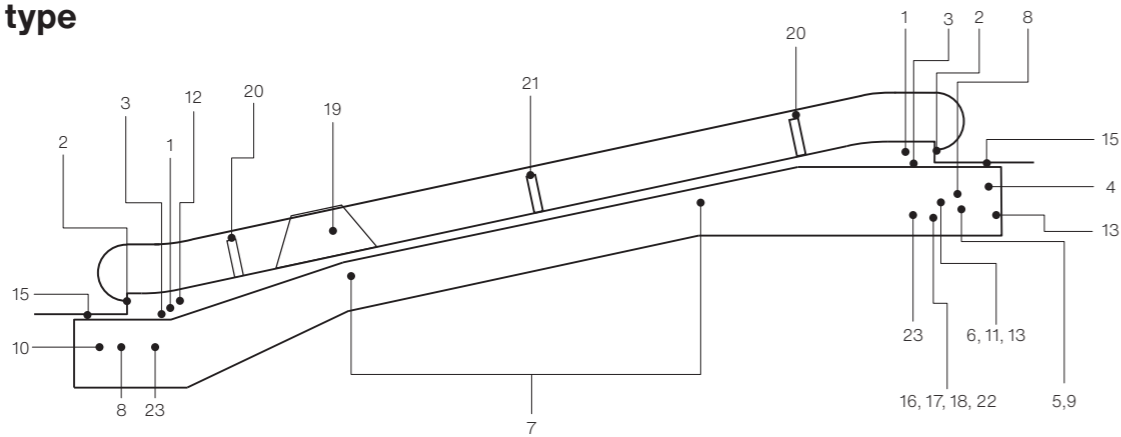
It can be seen from Figure 1 and Figure 2 that: a. The thickness of the movable ring (brake ring) shall be  $< 5.95$  mm;

b. The depth of the movable ring (brake ring) sliding into the palette groove shall be  $< 11$  mm;

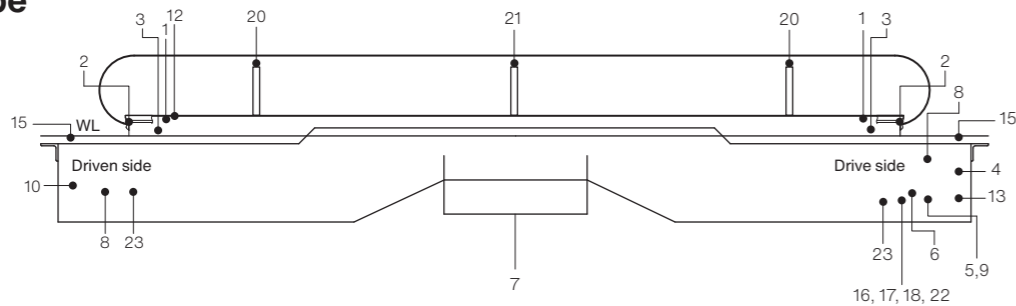
c. The thickness of the cart wheel shall be  $12.19 + 9.07 \times n$  (where  $n=0,1,2\dots$ ).



## ► Slope type



## ► Flat type



● Standard ○ Optional × Not Applicable

No.	Device name	Application	
		Slope type	Flat type
1	Emergency stop button (Built-in operation panel)	●	●
2	Handrail inlet safety device	●	●
3	Comb safety device	●	●
4	Electric-circuit protection device	●	●
5	Electromagnetic brake	●	●
6	Broken drive-chain detective device	●	●
7	Pallet sag detective device	●	●
8	Pallet cover	●	●
9	Motor overheat protection device (Built-in driving device)	●	●
10	Broken pallet chain detection device	●	●
11	Auxiliary brake (Apply to floor height over 6000mm)	●	×
12	Handrail speed monitoring device	●	●
13	Fire shutter interlocking device	Under developing	
14	Ratchet wheel (Apply to floor height 6000mm or Less)	●	×
15	Landing plate switch	●	●
16	Brake release checking device	●	●
17	Over speed monitoring device	●	●
18	Stopping distance detector	●	●
19	Running up prevention device ※Note1	●	×
20	Middle emergency stop button (Nearby upper and lower landing part) ※Note2	○	○
21	Middle emergency stop button (Nearby medium part) ※Note2	○	○
22	Reverse operation monitoring device	●	●
23	Pallet lack detector	●	●

Note 1: The number changes with the installation position of slope type moving walk. When moving walk adjoins the wall of a building, etc. and is installed, the running up prevention device of an adjoining side may not be installed.

The installation position of moving walk	Number
The both sides of moving walk adjoins the wall of a building, etc.	0
Only the right-hand side of moving walk adjoins the wall of a building, etc.	1 (Left hand side)
Only the left-hand side of moving walk adjoins the wall of a building, etc.	1 (Right hand side)
The both sides of moving walk do not adjoins the wall of a building, etc.	2

Note 2: This device provide when a shutter or a fireproof gate are installed in front of a landing place, and when pallet on and off to moving walk is barred.

## Structure Works

- If there is any discrepancy with the civil construction size, it must be corrected first according to requirements.
- Works of the reserved holes on the ground for installation. ● Works of the machine supporting beams of the truss (bearable reaction force shall meet the value specified by our company). ● Works of the intermediate support of the machine supporting beams (when intervals of the machine supporting beams exceed the size specified by our company).
- Works of beams and holes used for hoisting equipment installation. ● Decoration works of wall, floor, ceiling, etc.
- Decoration works of the ground between the landing plates (the outer side plate decoration) when there are multiple moving walks. ● If there is a gap between the moving walks after installation or the side of the moving walk is a patio, fixation facilities such as anti-falling nets or anti-falling railings (prepared by the customer) shall be set around the moving walk before it is put into use. ● External decoration works of the truss (external decoration weight shall be <math><12\text{kg/m}^2</math>). ● If the moving walk pit is placed on the base level, it shall be treated with the additional waterproof treatment and its depth shall be greater than the depth of the truss.

## Equipment Works

- Wiring works of connecting with the power supply for traction, the power supply for lighting and the grounding wire in the machine room on the top truss. ● External lighting works and wiring works of the power supply for external lighting. ● Works of the backup lighting equipment for power failure of the landing passage. ● Works of fire prevention equipment according to local regulations (when using the fire resistant curtain, connecting contact and pipeline wiring works shall be provided to the machine room). ● Signal wiring and piping works of the monitoring panel. ● All wiring and piping, automatic fire protection device or bottom lights must be fully installed on the outside of the truss.

## Additional work requirements

- Please provide a free working site, on-site construction office, material stacking and material storage room. ● Please ensure that the inlet and passage for moving the machine and heavy objects are unobstructed, and the protection measures have been taken around the passage. ● The anti-falling protective guard for falling objects before and during the installation works, as well as other safety devices, shall have been installed. ● Protection measures for falling objects and dust shall be taken from the completion of the installation to the beginning of normal operation. ● Electricity for installation works and commissioning operation shall be provided for free. ● Special moving charges must be paid by the customer separately. ● Objects unrelated to the moving walk shall not be installed or connected to the truss in any way. ● Items marked in the example (prepared by the customer).

## Others

- The power supply voltage fluctuation of the moving walk shall be within the range of  $\pm 10\%$ . ● The humidity in the building shall be kept below the monthly average of 90% and below the daily average of 95%, without moisture condensation. ● The temperature inside the building shall be maintained at 0–40°C. ● The moving walk shall be installed in an indoor area without being exposed to wind and rain. ● There shall be no chemical gas that may corrode metal or affect the contact of circuit contacts and no dust that may increase mechanical wear in the machine room.

- Head office / Manufacturing base
- Head office

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Together with our global partners, we connect with Asia and then the world, through our technology and our spirit. This planet is our shared heritage. We must live together, grow together and delight in one another.

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